

**POLICY AND
PERFORMANCE
IN INDIAN
EDUCATION
1947-74**

J.P.NAIK

FOREWORD

Before presenting the first Dr. K.G. Saiyidain Memorial Lectures to the public, I would like to introduce the Trust that sponsored the lectures.

Shortly after the sad demise of Dr. K. G. Saiyidain, some of his closest friends and the members of his family formed an *ad hoc* committee headed by Pandit H.N. Kunzru to consider ways and means of commemorating the memory of one of the most eminent educationists and litterateurs of India with international fame and decided to constitute an All India Memorial Committee under the presidentship of Nawab Ali Yavar Jung to appeal for funds to be devoted to the following objects :

- (a) Holding Saiyidain Memorial Lectures every year on Education, Literature and other subjects in Humanities or Social Sciences.
- (b) Printing and publishing the writings of K.G. Saiyidain.
- (c) Awarding scholarships to deserving students without any distinction of caste or creed.

When a substantial amount had been collected through donations from the Government of India, States of J. and K., Maharashtra and Gujarat, H.E. the Nizam's Charitable Trust, and some other philanthropic institutions and individuals, the Memorial Committee met and resolved to create a trust, Dr. K.G. Saiyidain Memorial Trust, to take over the work of collecting and administering the funds for achieving the objects indicated above. The Trust, consisting of the following persons, has since been duly registered :

Col. B.H. Zaidi (Chairman)
Mr. Mohd. Yunus
Dr. Abdul Aleem
Dr. Masud Husain Khan

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For the fulfilment of one of its main objects, the Trust decided to hold the first Memorial Lectures in September, 1974 at Srinagar, Kashmir, with which the late Dr. Saiyidain had long and intimate associations.

It was our good fortune to get the consent of one of Dr. Saiyidain's closest friends and associates, Shri J.P. Naik, to deliver the lectures, of the Government of Jammu and Kashmir to provide all facilities for the lectures to be held at Srinagar, of Shri L.K. Jha, the Governor, to inaugurate them, of Prof. Nurul Hasan, the Union Minister of Education and Syed Mir Qasim Sahib, the Chief Minister of the State, to preside over the first and second lecture respectively, to all of whom I and other members of the Trust are most deeply grateful.

The lectures were delivered on September 15th and 16th at Tagore Hall, Srinagar which was packed with a very interested and attentive audience consisting of the senior members of the staff of the State Education Department and the Kashmir University as well as many other intellectuals. I offer my sincere thanks to the Chief Minister for his generous hospitality to the learned lecturer and the office-bearers of the Trust and to Agha Ashraf Ali and his colleagues of the Education Department for their untiring efforts which made the function a resounding success.

I regard it as an auspicious augury for the future of the Memorial Lectures project that the first series of lectures was delivered by an educationist of the calibre of Mr. J.P. Naik who enjoys the unique distinction of having studied with selfless devotion and scientific thoroughness all the theoretical

and practical aspects of Indian education as an independent scholar as well as a member of official commissions and who has, for a long time, served in an advisory capacity in the Union Ministry of Education where he worked for many years in close cooperation with the late Dr. K.G. Saiyidain. These lectures, on a subject of most vital importance to our national life bear, therefore, a stamp of expert authority and foreshadow to a considerable extent the future educational policy of the Government of India.

I think I am not unjustified in hoping that the lectures will be read with deep interest not only by professional educationists but by all those who are interested in the education of the new generation of the Indian people who are to play a significant role in shaping the destiny of their own country as well as of the world as a whole.

New Delhi

1st January 1975

B. H. ZAIDI

Chairman

Dr. K.G. Saiyidain Memorial Trust

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POLICY AND PERFORMANCE IN INDIAN EDUCATION (1947-74)

I

Introductory

I feel deeply moved at the great honour which Dr. K.G. Saiyidain Memorial Trust has done me, more in its generosity than in its wisdom if I may say so, by inviting me to deliver the first series in his memorial lectures. I have accepted the invitation in a spirit of humility and because of my deep affection, respect for and gratitude to Dr. Saiyidain. He was an outstanding student, a great scholar, a sparkling conversationalist, a brilliant speaker (one of the most brilliant I have ever known), and a powerful and voluminous writer. He was also a gifted teacher who won the affection and life-long loyalty of his students, many of whom came to occupy leading positions in the Indian teaching community and made valuable contributions to the development of education in different parts of the country. As a man, he ranked even higher. His warm, genial and catholic temperament, his graceful and cultured behaviour, and his deep religious concern combined with unusual tolerance and understanding of other religions, won affection and esteem in large circles, both in India and abroad. Above all, what impressed people most was his deep humanism, his unshakable faith in the basic goodness and greatness of man, his continuing concern for the cultivation of the total human personality and his conviction that it is education of high quality that will

**This is the full text of the first series in Dr. K.G. Saiyidain Memorial Lectures delivered at Srinagar on 15-16 September, 1974. The views expressed herein are purely personal and do not represent any of the organizations where I happen to be working at present.*

ultimately prove to be the most powerful instrument to provide good and abundant life to every human being.

I have been a singularly lucky man in life ; and still I consider it to be my rare good fortune to have been so closely associated with Dr. Saiyidain. I first met him, in the context of the basic education movement, nearly 35 years ago. I came much closer to him when he became the Educational Adviser to the erstwhile Government of Bombay. I had the honour to work with him on several committees and later on as a colleague in the Ministry of Education (1959-60) and on the Education Commission (1964-66). I had also the good fortune of being a co-author with him of our book on COMPULSORY PRIMARY EDUCATION IN INDIA. Both my wife and I have almost been the members of his family for several years, and particularly close to Zohra whom we look upon as our own daughter. I have really no words to express the debt I owe to Dr. Saiyidain for his great role in my personal growth as an educator and an educational administrator. I therefore do consider it a privilege to offer this humble tribute to his memory.

Theme

The theme of my lectures this year is : POLICY AND PERFORMANCE IN INDIAN EDUCATION (1947-74). Today, I propose to review briefly the main educational developments of the post-independence period, to analyse the factors which have created the crisis in which we now find ourselves. Tomorrow, I intend to suggest alternative courses of action which may help us, over the next five to ten years, to rebuild a healthier educational system which would be more conducive to national development.

The Educational Situation in 1947

Let me begin with a brief statement of the educational situation on the eve of independence. In spite of all that had been achieved under the British Rule, we began our Freedom on a fairly low level of attainment in education in almost all respects. We then had 17 universities and 636 colleges

(with a total enrolment of 238,000 students), 5,297 secondary schools with 870,000 pupils (which implied that not even one youth in every twenty in the age-group 14-17 was in school), 12,843 middle schools with two million pupils (which meant that only one child out of every eleven in the age-group 11-14 was enrolled) and 172,661 primary schools with fourteen million pupils (which implied that only one child out of every three in the age-group 6-11 was in school). Vocational and technical education was but poorly developed, both at the school and university stages, and the supply of high level trained scientific man-power was very limited. Educational inequalities were very large, especially between one region and another, between urban and rural areas, between men and women, and between the advanced and intermediate castes on the one hand and the scheduled castes and tribes on the other. The standards of education were generally unsatisfactory, especially at the school stage, with too much of emphasis on English and too little stress on mathematics, science or the Indian languages. The percentage of literacy was only about fourteen and the total educational expenditure was just about Rs. 570 million or less than half a per cent of the national income.* It was this challenging situation which the nation was called upon to reform when it kept its first tryst with destiny in 1947.

Overall Policy

The national leadership had realized that what the educational situation needed was a revolutionary approach which would bring about radical changes in objectives, structures, processes and organization of education—a dream which the national education movement had cherished since 1905. For instance, in his address to the National Educational Conference convened by the Ministry of Education in 1948, Pandit Jawaharlal Nehru said : “Whenever conferences were called in the past to form a plan for education in India, the tendency, as a rule, was to maintain the existing system with

*The statistics relate to education in undivided India : they include those for the areas now included in Pakistan and Bangladesh but exclude those of the erstwhile princely Indian States.

slight modifications. This must not happen now. Great changes have taken place in the country and the educational system must be in keeping with them. *The entire basis of education must be revolutionized.* This hope was unfortunately never realized. We did not attack the educational problem in its totality, but in an *ad hoc* and piece-meal fashion. We never provided education with the large financial resources it must have. We never put into education all that immense human effort which it always needs. We never tried to mobilize the community as a whole to support the expansion and improvement of education. Above all, we did not also try to introduce radical structural changes in society without which radical structural changes in education are not possible. Consequently, our overall achievements in education have not been impressive, except in a few sectors, and many of the basic educational objectives of a socialist society have still remained unrealized.

Adult and Elementary Education

Perhaps, the analysis would become clearer if we examine, in some depth, a few major areas of educational development.

The Constitution makers had the laudable objective of transferring effective political power to the masses, the *Daridra-narayana* of which Mahatma Gandhi always spoke. To this end, they adopted the system of parliamentary democracy based on adult franchise. It is obvious that this constitutional mechanism alone will not secure the objective, especially, as the right to property also had been simultaneously enshrined in the Constitution as a fundamental right. It was, therefore, necessary to adopt, side by side, some political, economic and educational measures also. In the political sphere, the masses had to be effectively organized and politically educated so that they would have self-awareness and self-confidence. In the economic sphere, they had to be assured of the right to work, a minimum standard of living, and full involvement in developmental efforts. In education, mass illiteracy had to be liquidated

and good quality primary education had to be provided to all children. The last of these issues got incorporated in the Constitution as a Directive Principle of State Policy with a specific time-limit of ten years for total achievement, although the Constitution-framers and the national leadership were well aware of the other requirements as well.

How have we performed in this closely knit package deal? I must confess that we have failed badly on the political and economic fronts. All the political parties have largely converted themselves into electioneering machines and have hardly made the necessary efforts to organize the masses and to give them a political education which would help them to exercise effective political power and to participate, ably and enthusiastically, in all developmental programmes. On the economic front, the minimum needs programme never received adequate emphasis in our plans. In 1962, we said that we should provide a minimum wage of Rs. 20 per person per month (at 1960-61 prices) by 1975-76. It still remains a distant dream. Unemployment is still large and increasing and in the absence of a right to work and guaranteed minimum income supported by an adequate public distribution system for essential consumer goods, the poverty of the bottom thirty per cent of the people has remained unmitigated.

Against this political and economic background, even a good policy of mass education would have failed. As it was, our policies in mass education were defective in themselves and were also implemented in a half-hearted fashion. For instance, it was a wrong policy that we did *not* place adequate emphasis on direct programmes of adult education to liquidate mass illiteracy. The investment required in this programme is so small (it costs about Rs. 30-40 even at the present level of prices to make an adult literate) and it makes so fundamental a difference to the individual and to society as a whole that, from the cost-benefit point of view, it would be difficult to conceive of so economical a method of social transformation. And yet, throughout the post-independence period, we have been spending less than one

per cent of the total educational expenditure on adult literacy classes and making only about half a million people literate every year. Adult education proper which can be given with or without formal literacy was not even attempted. The results have been disastrous. Literacy has increased from about fourteen per cent in 1947 to only twenty-nine per cent in 1971 or roughly at about five-eighths per cent a year when population has been increasing at more than two per cent per year ! We have, therefore, more illiterates in our midst today than we had in 1947 : and we still have the dubious distinction of harbouring more than half the illiterate population of the world.

In contrast with this virtual neglect of adult education, our policy of providing universal education to all children in the age-group 6-14 on a war-footing, i.e. in a period of ten years (1950-60), was essentially sound. But it has been badly implemented and we are still far away from the goal we ought to have reached fourteen years ago. I do not want to underestimate our achievements in this sector. During the last twenty-seven years, the number of primary schools has increased to about 500,000 and that of middle schools to about 100,000. The enrolments at the primary stage have increased to 63.8 million (i.e. an enrolment of four children out of every five in the age-group of 6-11), and that at the middle school stage to 15 million (i.e. the enrolment of one child out of every three in the age-group 11-14). There are nearly 2.5 million primary teachers (a fair proportion of them being women) who are, on the whole, better educated, better trained and better paid. But we have not been able to control either stagnation or wastage, both of which continue to be high. Even now, of every 100 children enrolled in class I, only about 40 reach class V and only about 25 reach class VIII. About half the total wastage occurs in class I itself. This is why the primary education system on which we make a very large investment makes so poor a contribution to the spread of literacy. What is worse, the standards continue to be poor in all respects ; and no attempt has been made to develop a work ethic through the universal introduction of work-experience. We have, therefore, failed to implement the

directive principle of Art. 45 of the Constitution, both in letter and in spirit, and one cannot even say when and how we shall be able to realize this national objective.

What is this failure due to ? Several reasons may be cited. The prevalence of mass illiteracy is partly responsible because experience has always shown that literate parents are the best guarantee to ensure that a child is enrolled in schools, is given a proper home atmosphere for his studies, and is retained in schools for an adequate period. We have also never provided adequate resources which the programme needs. It may also be argued that, in spite of all the lip-service given, we have never been adequately earnest about the programme. The middle and upper classes have supported it because it gives them the largest opportunities of new jobs, although at a lower level. Hence linear expansion has always been emphasized. But they have not shown a genuine concern to educate the masses which ought to have expressed itself in an earnest endeavour to improve standards, to relate education to environment, to introduce work-experience and to reduce wastage and stagnation.

Perhaps the most important reason for the failure of the experiment is that we have made no attempt to introduce those radical structural changes in the formal system of elementary education which alone could have extended its benefits to the masses of people. The main features of this system of elementary education which we inherited from the British administrators are two : It is very costly because it tries to provide all instruction through full-time and professional teachers. Secondly, it also provides only full-time education on the assumption that the average parent is well-to-do enough not to need the labour of his children till they are at least fourteen years old. Such a system has some relevance to the conditions in the rich and industrially advanced nations where the State has the resources to maintain it in a fair state of efficiency and the average citizen is rich enough to avail himself of it. But it can have hardly any relevance to the conditions in a poor country like India. Here the Government does not have the resources to finance this costly

model ; and the vast bulk of the people are also so poor that their children have to work from very early years, either at home or outside, and cannot avail themselves of the full-time educational facilities created in the system. It is also necessary to remember that the exclusive reliance of the system on full-time formal education has an inherent bias in favour of classes and a built-in unsuitability for the education of the masses. For instance, the system creates no problems for the classes which can afford to feed, clothe and send their children to schools on a whole-time basis. On the other hand, the masses get very little benefit out of it ; some of them never 'drop into' the system while most of the others 'drop out' of it at the elementary stage itself without any worthwhile achievement. One understands the initial adoption of this system by the British Government because their declared objective was to educate a class. But there is no justification for a national government committed to egalitarianism having continued this policy for twenty-seven years after independence.

Secondary and Higher Education

Let me now turn to secondary and higher education where the overall picture is somewhat different. On the one hand, we have some major achievements to our credit. On the other, our failures in this field have been so glaring and significant that they have put the future of the entire educational system in jeopardy.

Let me begin with the three main achievements in this field. The first and foremost is the development of science and technology and the large expansion of trained scientific and technical manpower. There has been immense progress in science education and research in all sectors. Engineering education which lacked both quality and quantity in 1947 has since been expanded and improved tremendously through a national network of institutions beginning with the industrial training institutes at the bottom and ending with the regional engineering colleges and Indian Institutes of Technology at the top. The large development of indus-

try in the post-independence period, the increasing self-reliance of the country in all fields of scientific and technical know-how, and the recent underground explosion which made us one of the six nuclear nations in the world are all effective testimony of our substantial achievements in this area.

Agricultural and Medical Education are two other fields in which we have made commendable progress. In 1947 the country had only 17 institutions for higher education in agriculture. Today, there are 19 agricultural universities and about 100 agricultural colleges. We have been able to create a large stock of competent agricultural scientists : and the Indian Council of Agricultural Research has mounted an immense programme of research which has made a major contribution to the Green Revolution. In medical education, we had, in 1947, only 15 medical colleges with an annual intake of about 1200 students. Today there are 100 medical colleges with an annual admission capacity of 12,500. There has also been considerable expansion in post-graduate teaching and research in medicine. The number of doctors has considerably increased and there has also been a similar expansion in para-medical personnel. Consequently, it has been possible to increase and improve medical facilities and health services so that the death rates have fallen very greatly and the average expectancy of life has risen in proportion. It is true that even these success stories have their own weaknesses. But on the whole, they do not detract from the claim that the main educational successes of the post-independence period lie in the fields of education in agriculture, medicine, science and technology. It is also necessary to point out that the beneficiaries of these programmes have mostly been the classes in power and this is probably the main reason why they received priority and careful attention, both in policy formulation and implementation.

As against these, we may contrast three of our main failures in the area to even out the score and even more. The first is the failure to diversify and vocationalize higher second-

dary education so that about half of the students at this stage would choose courses that would have prepared them for middle level jobs rather than for entrance to the university. The need for this had been realized as early as in 1882 and yet very little had been done during the British period to implement the programme effectively. In the post-independence period, some major steps were taken from this point of view and there was considerable expansion in several programmes of vocational education at this stage. But side by side, the facilities of general secondary education increased so much that even today, the enrolment in vocational courses is about 9 per cent of the total enrolment at the secondary stage (as it was in 1947) and the proportion of the age-group being trained for vocations (about 2 per cent) is still the lowest in the world. The reasons for the failure are partly social (i.e. the unfavourable wage policies for middle level skilled workers as against white-collar job-operators), partly educational (i.e. the failure to control the expansion of general secondary education) and partly economic (i.e. the failure to create adequate job opportunities).

Our second main failure is related to the restructuring of secondary education. In 1947, we had a school stage of about ten or eleven years leading to the matriculation examination, an intermediate stage of two years, and an undergraduate stage of two years leading to the first degree. To adopt the 10+2+3 pattern which has been before the country since 1919, all that was necessary was (i) to reduce the stage leading upto the matriculation uniformly to ten years in all States; (ii) to transfer the intermediate course from the universities where it was a mis-fit to the school stage where it properly belonged and to introduce a large vocational element therein to divert a proportion of students into the world of work; and (iii) to increase the duration of the undergraduate course to three years in all areas. But unfortunately this was not done. On the recommendation of the Secondary Education Commission, it was decided to split the intermediate stage into two parts, one year going to the school and the other to the university, and thus to in-

troduce a uniform school stage of eleven years and an undergraduate course of three years. This was a retrograde step for several reasons. The eleven year higher secondary course was wrong because it introduced specialization too early (at the end of class VIII), made vocationalization difficult, and increased expansion (because it was too early to introduce a selective element at the end of Class VIII so that all those who entered the secondary course in Class IX were perforce required to climb upto Class XI). The intermediate stage served a very useful dual purpose. On the one hand, it gave good preparatory education to those who wanted to enter the university. On the other it also made it possible to give good vocational education to those who wanted to begin working for a livelihood. It was, therefore, a grievous error to break it up. We have thus lost valuable time; and what is even worse, we have to pay dearly for this mistake by reintroducing the intermediate stage again. Here is a clear case of a wrong policy and faulty implementation.

Our third major failure in this area has been the unplanned, haphazard and indiscriminate expansion of secondary and higher education. There are now about 40,000 secondary schools with an enrolment of 8.5 million (about ten times that in 1947) or a little more than one student for every five in the age-group 14-17 (as against less than one in every twenty in 1947). The number of universities has increased to about a hundred, that of colleges to 4,000 and their enrolments to 3.4 million (against less than 250,000 in 1947). If the linear expansion in adult and elementary education was less than adequate and generally fell short of the planned targets, that in secondary and higher education has always been more than desirable or healthy. This is also the one area where we have always exceeded our 'targets'.

This 'achievement' is again a reflection, not so much of what happened in education *per se*, as of the social, political and economic forces at work. The class-base of political power naturally led to a greater emphasis on secondary and higher education which benefit the 'haves' rather than the 'have nots' so that the expansion programmes at these

stages received early attention, greater priority and more adequate allocations than those of mass education. The expansion of industry, both in public and private sectors, and the large expansion of the services sector (including governmental services at all levels) created an immense demand for the products of secondary schools and universities. At the same time, the number of aspirants for these posts increased even faster so that there was a general attempt to receive education on an increasingly higher level to get a job at an increasingly lower level. This increased the rush to secondary and higher education even further. Other contributory factors were ; the predominance of private enterprise which often deprived Government of an initiative in the matter ; built-in pressures to absorb the products of the education system within the system itself, as teachers ; and the absence of employment becoming a cause for students continuing to linger within the system.

This large and spiralling expansion of secondary and higher education had, it may be admitted, some good results. It has given access to secondary and higher education to several social groups which did not have it in the past. It has increased equalization of educational opportunity and, to some extent, even equalization of economic opportunity. The weaker sections of the society (and particularly the women and scheduled castes and tribes) have found, through it, new opportunities for vertical mobility and have thrown up new leaderships and bands of workers. This has also been socially beneficial and helped in creating a more evenly balanced society. On the other hand; it has had several serious consequences. Its deleterious effects on standards are obvious ; and it has created an increasing and extremely difficult problem of educated unemployment which has snapped the motivation of students and created large stresses and strains within the system. It has also made the system far too big to be manageable and prevented the investment of adequate resources into more vital sectors like universal primary education or liquidation of adult illiteracy.

The deterioration in standards sparked off by this unplanned and uncontrolled expansion is further aggravated by the fall in teaching standards, over-crowding, and inability to provide the necessary facilities and satisfactory working conditions. The student community now includes a large proportion of persons whose motivation is minimal and whose competence to profit from general secondary and higher education is also questionable. The lengthening distance between education and jobs has made the students restive and the trend is heightened by politicians who try to exploit this discontent for their own purposes. Student unrest has thus become a major factor which makes it extremely difficult to reform or even to run universities and colleges. This evil has now reached such proportions that it has begun to threaten the future of education.

Educational Standards

The maintenance of standards in education is extremely crucial because an education whose quality is not guaranteed is no education at all and can do more harm than good. Unfortunately, our policies and programmes in this area leave a good deal to be desired.

There is a general view that standards in education have continually and alarmingly deteriorated in the last twenty-seven years. This would be only partially true. A more correct assessment of the situation was given by the Education Commission (1964-66) which observed that the overall picture is a mixture of light and shade. Standards have definitely improved in certain sectors. The number of good institutions and of first-rate students has considerably increased at all stages. There has been a steady improvement in average qualifications and remuneration of teachers and some improvement in curricula and teaching materials. But there has also been an immense increase in such negative factors as the rapid increase in sub-standard institutions, deterioration in facilities and conditions of work and service in a large number of schools and colleges, or the breakdown of the examination system through large-scale practice of unfair means. We are in fact operating a 'dual' educational

system which has, at all stages, a core of a small number of good quality institutions which are surrounded by a large periphery of sub-standard institutions. The gap between the best and the weakest group of institutions is also very wide because our system has an almost unlimited capacity to tolerate institutional inefficiency.

Why do we operate such a dual system ? The answer is again to be found in the class-structure of our society. We are not able, on account of our proverbial 'softness' as governments, to prevent the unplanned and rapid growth of educational institutions. We do not also have the resources to improve *all* our educational institutions. We, therefore, try to improve a few educational institutions and leave the rest to function at low levels of efficiency. Then we so manage things, either through levy of fees, or through the so-called selection on merits, that the good institutions are largely availed of by the children of the well-to-do classes in power and that the children of the masses are willy-nilly driven into the free or low fee-charging institutions of poor quality that function at the periphery of the system. This enables us to keep up appearances of egalitarianism and to talk of an open door policy of free admissions for all. But in effect, the classes receive highly subsidized education of good quality in private or selected public institutions, while the children of the masses are served a poor quality education in free public institutions. This tends to increase rather than decrease the inequalities in our society. This dualism also gives an easy option to the ruling classes to secure good education for their children, either in the 'core' institutions within the system or by opting out of it (i.e. by use of public or independent schools) without being required to undertake the more difficult task of improving the entire educational system. Of course, such a situation is not unique to education. One finds it in all public services such as health, transport or housing. This makes it not less but more heinous.

Another reason for the failure to improve standards adequately is our unwillingness to make the essential academic

inputs. In the last twenty-seven years, we have mostly relied on financial inputs to expand and improve education. What the programmes of expansion need is provision for salaries of teachers, buildings or equipment. All these can be easily had for money, especially if we are not keen on careful planning or maintenance of even minimum standards. This is one reason why we have succeeded fairly well where ordinary programmes of linear expansion are concerned. But when it comes to programmes of qualitative improvement, money is necessary but only as a minor investment. What these programmes basically need is human effort and intellectual academic inputs : able, hard-working and committed teachers ; well-motivated, painstaking and committed students ; and an interested, co-operative and enthusiastic body of parents. Without such human inputs and hard intellectual work, we will not be able to improve curricula, prepare text-books of high quality, adopt dynamic methods of teaching, plan and carry out examination reform, relate education to local environment or bring the school and community together in programmes of mutual support and service. But it is precisely this climate of dedicated hard work and intellectual inputs that has been lacking ; and unless we create it somehow, no monetary investments alone can help in raising standards.

Financial Investments

If investments in education in current prices are a criterion of our interest in education and preparedness to sacrifice for it, we have done fairly well, but not enough. In the last twenty-seven years, total educational expenditures have risen from about Rs. 570 million (or less than half per cent of the national income) in 1947 to about Rs. 13,500 million (or about 3 per cent of the national income) in 1974. This implies a growth of about 10 per cent per year (or twice that of the growth in national income). For a poor country at this low level of economic development which has such large competing claims for priority from other sectors, the significance of this achievement cannot be underestimated. All the same, one has to admit that education never received

adequate priority in the plans of development in the post-independence period, whether in absolute terms or relatively to investment in other sectors. Educationists have been demanding ten per cent of the total plan outlay to be set aside for educational purposes. In the First Five-Year Plan, however, education received 8.7 per cent of the total outlay. In the second and third Plans, this fell down to 6.3 and 6.7 per cent respectively; in the Fourth Five-Year Plan, the share of education fell down further to 5.1 per cent; and in the draft Fifth Five-Year Plan, in spite of all the efforts made to the contrary, it has gone down still further to 4.6 per cent. As the economic difficulties have increased it is very probable that, in actual fact this share may be even less. It is an irony that the rate of growth in educational expenditure began to decline ever since the Report of the Education Commission was submitted in 1966.

The Present Crisis in Education

The foregoing discussion will show that we now have a first-rate educational crisis on our hands. During the last twenty-seven years, we have made a large investment in educational development so that the overall size of the educational system has grown to about five times* and some qualitative changes have also been introduced. But several of our major educational objectives have yet remained unrealized and owing to the errors of commission and omission, the stresses and strains within the educational system have simultaneously increased to an even greater extent. The urgent need to transform the educational system in keeping with the needs and aspirations of the people, to improve its quality and even to expand it further has, therefore, become greater than ever. Over the next ten years, therefore, the further investments in the educational system will have to be far larger, both in absolute and relative terms, than those in the last three decades. What is even more important, the human effort inputs in the system on the part of teachers, students, administrators and even the general public, which

*For some growth statistics of the period 1947-74, please see Appendix IV.

have been even more inadequate in the last three decades, will also have to be immensely larger.

What is our response to this challenge? On the financial side, the overall picture is disheartening. In view of the immense economic problems we are facing at present and the increasing competition for priority from other sectors, it appears that education will have to face a fairly long period of financial stringency in which additional investments would be difficult to come by and would, in all probability, be far too inadequate to meet even the minimum needs of the situation. On the human effort inputs side, the picture is even darker. At present, discipline among teachers and students has weakened and discontent has greatly increased. In many class-room situations, the educational process just does not take place: the students are not adequately motivated to learn and the teachers are often uninterested in or incapable of teaching. The revitalisation of the basic educational process throughout the educational system by the deep involvement of teachers and students has thus become an extremely difficult task, especially in the general climate of discontent and cynicism that has begun to spread.

We are thus facing the worst crisis in education in the post-independence period. On the one hand, the major tasks of educational reconstruction, which are still unfinished, have become more urgent than at any time in the past and demand for larger inputs, both in terms of financial and human effort. On the other hand, the possibility of making these inputs seems to have become weaker than at any earlier time. It is this impasse that constitutes the present crisis in education. Some suggestions to deal with this crisis will be the theme of my discussion tomorrow evening.

II

Yesterday, I drew attention to some of the major achievements of the education system during the last twenty-seven years as well as to some of its glaring failures. I also pointed out that the limitations on our success in educational development were due to several factors such as inadequate emphasis, piecemeal rather than integrated approach, adoption of wrong priorities, the class-base of the political power-structure, failure to initiate a simultaneous and vigorous programme of social and economic reform and inadequate human effort inputs. I further indicated that, in spite of our achievements, we now have to deal with a first rate crisis, like a traveller who finds that even when he is less than half-way to his destination, his purse has been stolen and his car has developed serious engine troubles. Today, I propose to discuss some significant measures to deal with this crisis.

An Integrated Approach

As education is a sub-system, the statement that education is a powerful tool of social reconstruction is only partially true ; and equally so is the statement that structural changes in society will necessarily lead to desired changes in the education system. An educational reform like provision of universal primary education may be frustrated by social factors like strong prejudices against the education of girls just as programmes of social reform like population control can be materially hampered by educational weakness (like mass illiteracy or lack of adequate education) among women. What has the best chances of success is an integrated approach : a simultaneous effort to transform society and education in keeping with the national goals of socialism and

democracy and the ultimate creation of an egalitarian and non-exploitative society based on justice, equality, freedom and the dignity of the individual.

How shall we set about this integrated approach ? The first step is to revitalize and strengthen the planning process. Ever since 1962, planning has suffered in one way or another. The Third Plan could not achieve its targets ; we then had practically a plan holiday for three years ; the Fourth Plan ran into serious troubles in its later years ; and the Fifth Plan refuses to take off the ground. These very failures in planning and inadequacy of investments over the last twelve years are creating serious problems in all walks of life. Education is particularly vulnerable to failures in planning so that in spite of all achievements and investments, the overall situation at the end of a plan period tends to become more acute than that at the beginning of the plan period. If this sad experience is not to be repeated, we must take immediate steps to control inflation, stabilize prices and restart the planning process in a big way so that massive resources are available for all development, including education. This is the first essential step without which no radical change in education or any other walk of life is possible.

The next step is to restructure the overall plan priorities. We have talked of the minimum needs programme for more than two decades. But it has not become the central focus of any Plan, in spite of the slogan of *Garibi Hatao* raised five years ago. Moreover, the entire planning process continues to be geared to improving the standard of living of the classes. We must now realize that these priorities are wrong and that the standard of living of the masses cannot be improved, nor will there be adequate surpluses for investment, unless simultaneous steps are taken to curb the consumption of the top thirty per cent of the people. In keeping with our goal of socialism, therefore, the highest priority will have to be accorded in the plans to the minimum needs programme which will involve adequate production of basic consumer goods, the creation of a large and efficient public distribution system, guarantee of employment to every able-bodied person, basic health and educational services and

land for housing. This will also imply a simultaneous reduction in the consumption of the well-to-do, a massive effort at resource mobilization, several structural changes (especially in agriculture) and population control.

The third major step is to involve the masses of people in programmes of planned development. Our planning process is highly bureaucratized. Both in formulation and implementation of plans, the political system does not play its proper role; nor are the masses of people fully involved. This handing down of plans from above to the agencies at lower levels (instead of building them from below) and this view of treating planned development as the engineering effort of a few for the benefit (?) of the many has not succeeded and cannot succeed. It is not only planning for the masses that counts: it has also to be planning and implementation by the masses themselves. It is this new approach that will make a qualitative change in our traditional view of planning and make education relevant to development. So far education has remained a 'social service' which is outside the 'core plan': it only means that it is an irrelevant frill which can be ignored at will. In the new approach of intelligent popular participation in the formulation and implementation of plans, education and development become two sides of the same coin, get integrally related together, and have to be simultaneously attempted. In short, the basic motto for the plan becomes: *Education through reconstruction and reconstruction through education.*

It would be beyond the scope of these lectures to deal with these general issues of planning. But I have referred to them here mainly because it is only against such a background that attempts at educational planning are most likely to succeed.

Structural Transformation of the Educational System

I shall now turn to the discussion of programmes of educational reconstruction. For lack of time, I shall make no attempt to be comprehensive. Instead, I will go into some depth, but deal only with a few major crucial programmes. I will begin with the structural transformation of the educa-

tional system) as, in my opinion, it (is the one basic reform that should precede everything else) If priority is to be given to mass education, including the education of workers, our definite targets should be to liquidate mass illiteracy, to provide universal elementary education for all children in the age-group 6-14 in a period of ten years at the most, to develop a large-scale programme for the non-formal education of out-of-school youth in the age-group 15-25, and to provide adequate opportunities to the talented youth from the masses to receive secondary and higher education. The main difficulty that prevents the implementation of these programmes is the existing structure of the formal educational system with its single-point entry, its sequential promotions from class to class every year, its exclusively full-time courses, its professionalized body of teachers which is basically oriented to the interest of the classes and is inimical to those of the masses, its tendency to become a vested interest and help to perpetuate privilege or conformity rather than to promote equality or healthy dissent, and its costs that are high and continue to mount exponentially. It is obvious that we can continue with this structure only at great national peril and that so long as this structure persists, we can never hope to educate the masses effectively.

What we need instead is a more comprehensive and dynamic system in which there will be equal scope and status, at all stages, for all the three channels of education—full-time, part-time and self-study—so that each individual can continue to learn throughout his life and choose that channel, or combination of channels, that suits his needs and convenience best at any given moment. It will also need several points of lateral entry at various stages. The new system should also use, not only professionally trained teachers, but all the teaching resources of the community. Apart from these obvious advantages of elasticity and comprehensiveness such a system will also be more economical and within the resources which a developing country like ours can afford.

What should be the broad features of this new structure of the school system at various stages?

(1) At the primary stage, there should be multiple points of lateral entry. In addition to the regular entry in Class I at the age of 5 or 6 years, there should be special classes organized for older children in the age-group 9-11 or 11-14 who may be entering schools for the first time. These should ordinarily be on a part-time basis and of a condensed character so that they would make a student functionally literate in a short period.

(2) At the middle school stage, there should be, in addition to full-time courses, part-time courses for those who have completed class V or the functionally literate who cannot continue to study further on a full-time basis*.

(3) At the secondary stage, in addition to the full-time courses and night high schools, there should be adequate provision for part-time courses. Private study should also be encouraged by throwing open all the Board examinations to private candidates.

(4) A very important programme to be newly developed in the system is that of non-formal education in the age-group 15-25 which would be promoted, to the extent possible, through the existing institutions. It will have to be largely a programme of part-time education which may, whenever possible and necessary, be interspersed with short-term full-time courses.*

(5) In addition to the existing full-time courses of vocational education at the school stage, there should be large facilities for on-the-job training of workers through programmes of part-time education of sandwich courses. It should also be possible for a person to transfer himself from general to vocational courses and *vice versa* and carry his credits with him.

(6) At the university stage, the facilities for part-time education (like evening colleges) or correspondence courses should be increased and a National People's University (on the lines of the Open University in the U.K.) should be

*For details of structural changes needed in the educational system at the elementary stage, please see Appendix I.

*For a discussion of the significance and details of this programme, please see Appendix II.

established. Private study should be liberally encouraged by throwing open all university examinations for private candidates.

(7) Programmes of education should be developed on a large scale.

The existing educational institutions generally provide for only one channel of education, that is, full-time instruction to a category of students. What is now visualized is that most educational institutions will try to cater to the entire educational needs of the community around them. Apart from the regular category of students which they instruct on a full-time basis, they will also provide non-formal and part-time education to suitable categories of other local residents through the utilization of all the teaching resources available in the community.

Prof. S. Nurul Hasan, the Union Minister of Education, has been making valiant efforts to put forward these views from all possible platforms. Thanks to his efforts, these ideas have come to be accepted by the Central Advisory Board of Education, the Planning Commission and the State Governments. In some way, and on a limited scale, they have also found a place in the draft Fifth Five-year Plan. But recent discussions with the State Governments bring out two disturbing trends. Firstly, the financial allocations made for these programmes are comparatively very small; and obviously, the view taken has been that the best possible financial provision should first be made for the linear expansion of the existing system of formal education and only a small or token provision need be made for re-structuring the educational system on these lines and for programmes of non-formal education. Secondly, it has also been found that, when the plan allocations to education were reduced, the axe fell heavily on all new programmes, especially those of restructuring the educational system or of non-formal education. This is not the proper approach to the solution of the problem. The restructuring of the educational system suggested here is a programme of the highest priority and we must make every effort to see that it is implemented fully and quickly. It, therefore, makes no sense to devise a plan

for the further linear expansion of the existing formal system or for taking a view that the new changes must sneak in slowly and imperceptibly through the back door. Similarly, the funds required for this transformation have to be large and fully protected against cuts or diversion. Let me stress, with all the emphasis at my command, that a mere intellectual acceptance of new ideas is not enough to transform the educational system. What we also need is commitment, determination and sustained implementation. In our educational system, there are immense resistances to these changes at every point, among educational administrators, teachers, the general public and even students. In fact, the system resembles a new toy that is now in the market. It is a beautiful box with one button outside showing an 'on' position when it is pressed down and an 'off' position when it is pulled up. As soon as the button is pressed down to the 'on' position, beautiful music starts, the box opens, a hand comes out, pulls the button up to the 'off' position, and gets into the box which closes immediately. The music then stops and we are back again to square one. These internal (as well as external) resistances are meant to be overcome through a well-organized and extensive programme of education of all concerned regarding the significance and urgency of these long-delayed reforms. It is the duty and responsibility of the believers, and the committed, to initiate and promote this restructuring.

The Content of Education

If the masses and the workers are to be made the central focus of the national system of education, a restructuring of the existing educational system is necessary but not sufficient. We will have to go ahead with one more urgent reform, namely, to transform the content of the educational system to suit the needs of the people. This will involve radical changes, not only in adult and elementary education, but in other sectors as well.

In the programmes of adult education, it has been the tradition to emphasize literacy. By and large, programmes of adult education have not been co-ordinated with those of socio-economic development; and from a mistaken fear to

keep out politics, no attempt has been made to give the adults a sense of self-awareness and dignity and to involve them in serious discussions of the different problems facing the country. These wrong traditions have made the programmes of adult education uninspiring, if not actually dull and boring. Even if we had the finances necessary, programmes of this type, which will not motivate the adults adequately, are more likely to fail than to succeed. What we need is the adoption of an entirely different strategy. Where the adults are illiterate, literacy will, no doubt, form an important step in their education. But it need not be made indispensable. Instead of adopting the approach of literacy first and general education next, it would be desirable to emphasize general education through the word of mouth, or audio-visual aids, as the core of the programme. If properly conducted, this will, in all probability, stimulate the majority of the adults to learn to read and write. When they feel so motivated, literacy should be included in the programme. But if they do not feel so motivated, it may be left out: this will not detract from the value of the programme as a whole.

The main foci of adult education should, therefore, be three. The first would be the upgrading of vocational skills or on-the-job training. The object of this part of this programme would be to make the adult more efficient in his job and to help him to earn better and to improve his standard of living. As poverty is the most important problem to be tackled, this will be an effective programme for motivating the adults. The second part of the programme should be, what Dr. M.S. Swaminathan calls *techniracy*, or imparting the basic knowledge of science and technology to the adults in a simplified form with direct implications for their job, their health, family planning, and other aspects of their life. The third part of the programme would be citizenship which will include a study of the cultural heritage of the country, a history of the freedom movement, a rational discussion of the different problems such as poverty, unemployment, population growth, defence, etc, facing the country, and the part which they are expected to play in their solution

and in national development. Special emphasis should be laid on creating a sense of self-awareness, and an understanding of their rights and responsibilities as citizens, and on building up a sense of dignity as individuals so that they would stand up when it is encroached upon. What I have in view is something like the programme of conscientization suggested by Paulo Freire. It is only a programme of this type that will make adult education relevant to our programmes of national development.

In the programme of non-formal education for out-of-school youth in the age-group 15-25, the core content will necessarily include the three foci described above under adult education, namely, upgrading of vocational skills, *techniracy* and education for citizenship. In addition, two more foci will have to be added : (1) physical education, games, sports and recreation ; and (2) participation in programmes of service to the local community. The attempt should be to individualize instruction as far as possible and offer a package deal to each person to meet his requirements.

The class-biased system of elementary education which we inherited from the British administrators had a very limited objective, viz., to prepare a student for admission to a secondary school. Its curriculum was not related to the immediate environment nor did it have any worthwhile component of work experience. Our major error has been that we are trying to extend the system, without making any changes of content, for the education of masses. This can only have disastrous consequences because it makes elementary education largely dysfunctional to the life of the average child from the families of workers and peasants and spreads the unhealthy white-collar attitudes to the masses also. For instance, the late Shri E. W. Aryanayakam used to say that the handicrafts of India, which earn so much of valuable foreign exchange continue to survive for the simple reason that our attempt to introduce universal elementary education has not succeeded !

It was to correct this weakness of the elementary system of education, in the interests of the masses as well as of the classes, that Mahatma Gandhi promulgated the scheme

of Basic Education of which Dr. K.G. Saiyidain was so ardent as admirer and advocate. This is one of the major reforms which the educational system needs and which has remained unimplemented so far. The main obstacles have been, not the lack of funds or the non-availability of suitable teachers as has often been made out, but the resistances of the classes who dominate the scene and who do not desire to give up their white-collar attitudes. They defeated the programme of basic education ; and it is they who also prevent the introduction of work-experience in the education system. It must also be realized that a radical programme of this type cannot be implemented successfully at the elementary stage only in the absence of its simultaneous introduction at the secondary and higher stages. The new strategy to be adopted should, therefore, include three simultaneous attempts : (1) to implement the programme of work-experience on a priority basis at the elementary stage ; (2) to introduce it simultaneously in secondary and higher education as well ; and (3) to break down the dominance of white-collar attitudes in society by introducing programmes based on the dignity of manual labour in all walks of life. In China, for instance, even the manager of a factory is required to take his turn in cleaning and sweeping the floors. I do not see why such practices should not be introduced in all our organizations. In fact, the Government offices are so over-staffed that their efficiency would improve if they are made to work for five days a week only and all employees are required, for one day a week, to participate in manual labour and programmes of social service to the community. Such measures would bridge the wide gap that now exists between intellectual and manual labour and facilitate the successful introduction of work-experience in the educational system.

Like work-experience, the new programme of education for citizenship which I have indicated above, has also to be introduced, at all stages of education with appropriate modifications to suit the age and maturity of the students. I particularly support its introduction at the undergraduate stage where it should become obligatory for all students irrespective of their subjects. It will make education more

relevant to national development than any other step I can think of. It will make the students politically conscious and knowledgeable, prevent their exploitation by political parties and also have a very salutary effect on the general political climate in the country ; and what is equally important, it will then be possible to use the undergraduate students in colleges and universities to work among the out-of-school youth in the age-group 15-25 so that the programme can really be developed on the scale necessary.

One important point deserves mention. Education is essentially a three-fold process : imparting of information, teaching of skills and cultivation of values. In the present educational system, the emphasis is almost exclusively on the first of these objectives, viz., the imparting of information. The second objective, viz., the teaching of skills is partially attempted and the production skills are almost totally neglected. Hence the need to emphasize work experience, promote self-study habits and develop problem-solving abilities. But the most important reform relates to the third objective which has been neglected in the past, viz., the cultivation of values. Let us realize that no education can really be value-neutral and that if we do not cultivate the right values, the wrong ones will eventually emerge and dominate the scene. We must, therefore, now lay the highest emphasis in our educational system on the cultivation of values appropriate to a modern, democratic and socialist society. These will include : a commitment to egalitarianism ; tolerance, willingness to see the other person's point of view and capacity to work in groups with shared objectives ; a rational and scientific temper ; a secular outlook ; willingness to work hard and sacrifice in the larger interests of society ; and discipline.

New Priorities

The proposals made above, viz., restructuring the existing formal system of education and the transformation of its content will have two main advantages : (1) the existing system will be able to provide education, not only for the children of the well-to-do classes, but also for the children from the poorer sections of the society, out-of-school youth, and

adults ; and (2) it will also make the education imparted in the system more relevant, and enable the people to participate intelligently and effectively in all programmes of development. Both these are major objectives in the proposed reconstruction of education.

As a follow-up of these reforms it is essential that the existing priorities should be re-ordered. At present, adult and elementary education do not have the priority they deserve. It is, therefore, proposed that direct programmes of adult education should be accorded high priority. These could be best organized as a part of developmental programmes which provide employment of adults or help them to increase their productivity. Organizing them even on a monetary basis would not require large investments. But it is also possible to organize them, at a much smaller cost, through mobilization of the voluntary labour of teachers, students, and other employees in the public sector. Similarly, elementary education should be developed on a priority basis and made universal within the next ten years or even earlier. This will need a large programme of part-time education for grown up children (who are required to work) and a system of multiple-entry. To cut down costs, several plans will have to be adopted : the double-shift system may be introduced ; a system of volunteers may be evolved so that young persons who have completed secondary school or college may work in elementary schools for a year or two with subsistence allowances before they start working ; and the community resources may be fully harnessed in human, monetary and material terms. For older age-groups, a major programme would be that of non-formal education of out-of school youth in the age-group 15-25. This may begin on a voluntary and experimental basis but will soon have to be made universal. Needless to say, this decision to accord high priority to adult and elementary education will necessarily imply that secondary and higher education will, on the whole, receive a lower priority. In spite of this, care should be taken to see that the secondary and higher education of at least the talented children from the masses receives its due consideration, and that the effect of this change in

priorities would mainly fall on the classes who had more than their due share in the past.

Some Problems of Secondary and Higher Education

The new policies in secondary and higher education would be governed by several major considerations. To begin with, the resources available to those stages of education would be comparatively less than those in the past. They will, therefore, have to be conserved mainly for programmes of transformation and qualitative improvement which are extremely significant at these stages. The obvious implication is that the further linear expansion of the existing formal system of full-time secondary and higher education on an institutional basis would have to be halted almost totally, both because of its class-bias and costs. Strict conditions for the establishment of new secondary schools, colleges and universities should be laid down and rigorously enforced. Their locations should be carefully planned and no secondary schools or colleges should be permitted except in areas which are largely underdeveloped in this respect.

There would be two implications of this decision for the open-door policies of admission which are now in vogue. The first is that the places available in full-time institutions of secondary and higher education would be limited and would fall increasingly short of the demand as time passes. The danger then is that these would tend to be monopolized by the classes on one ground or the other. Such an eventuality should be foreseen and prevented by reserving an adequate proportion of these seats for the talented students from the masses (with due provision of hostel facilities and scholarships). In particular, care should be taken to see that places in full-time institutions are adequately reserved for scheduled castes, scheduled tribes, first generation learners, and other representatives of the weaker sections of the society. The second consequence of this decision would be that the numbers of young persons who would be desiring to have secondary and higher education (whether employed or not) and who would be denied admission to formal institutions would also increase year after year. To meet their

needs, it should be a policy to expand, without any limit, the facilities of non-formal secondary and higher education through correspondence courses or programmes of private study.

In addition to this diversion of the excess demand for secondary and higher education in non-formal channels, it would also be desirable to adopt measures which would reduce the quantum of the demand itself or change its character so that the new policy finds better social acceptance and becomes easier to implement. At the secondary stage, the question of restricting the total size of the demand is less important, partly because the children are too young at this age to be gainfully employed, and partly because we do look forward to a day when education could be made universal even to the age of 16 plus. On the other hand, there is need to discourage the tendency to linger unnecessarily at school or to avoid accepting middle level jobs in the hope that something better might turn up later at the end of higher education. There is also need for diversification and vocationalization and for a good deal of vocational and educational guidance which will help the young persons to avoid the traditional highway of university entrance and to select, instead, one of the several alternative channels of vocational careers. This will require a revision of wage-policy so that the existing wide gulf between white-collar jobs and middle-level vocational ones is reduced and vocational careers at the end of the secondary stage are made more attractive.

At the university stage, the need to reduce the spiralling demand for higher education is far more urgent, especially in view of the growing unemployment among the graduates. This will need bold action on several fronts. In particular, methods of recruitment to public service will have to be suitably changed. Ways and means would have to be devised to ensure that a university degree is delinked from employment under Government. This can be done by making the bulk of the recruitment at the end of the secondary stage and then providing suitable opportunities for in-service education and promotion or by holding independent competitive

examinations, unconnected with formal education, for specific jobs in the public sector.

Another major policy that would again help to conserve the meagre available resources for essential programmes would be to reduce, rather than increase, the large existing gap between the facilities provided at the elementary stage on the one hand and secondary schools, colleges and universities on the other. The facilities we now provide at the elementary stage will have to be considerably upgraded; and, at the same time, those at the secondary and university stages will have to be correspondingly planned on an austere basis. For instance, single and functional buildings, without the use of cement or steel should be accepted as a policy for all stages of education; and there should be no attempt to preach, on the one hand, that a primary school does not need a building and can be held under a tree, while luxurious buildings are constructed for universities as if their intellectual and academic status is proportional to the height of the Senate towers. If school meals have to be subsidized, this will have to be done on a priority basis at the elementary stage; and so on. If the major policy to reduce the wide gap in the consumption of the classes and masses has any meaning, it must be reflected, in education, in equalizing, to the extent possible, the standard of facilities to be provided in elementary schools on the one hand and the secondary schools and institutions of higher education on the other. In fact, it must also be reflected in reducing the wide gap between the remuneration of teachers at various levels, a gap which unfortunately is tending to become even wider in future.

I will not repeat what I said yesterday about the adoption of the 10+2+3 pattern and the vocationalization of the higher secondary stage. Both these reforms are urgent and must be carried out on a priority basis.

I have already stressed the need for an all-out emphasis on improving standards in secondary and higher education. I will not, therefore, take your time by going into the details of the large number of programmes that have been suggested

from this point of view, partly for lack of time and partly because they are widely known. But even at the cost of some repetition, I would like to emphasize one objective of reconstruction at these stages (and programmes to give effect to it), viz., the whole concept of involvement of teachers and students in national development through programmes of social service. The leadership arising from secondary and higher education during the last twenty-seven years has, by and large, been exploitative in character, irrespective of its origin in the classes or the masses. If this situation has to be changed and the leadership arising from secondary and higher education is to be oriented to the service of the masses and to national development, it is essential to involve all students and teachers at these stages in programmes of national development as an integral part of their basic studies. Similarly, we should expect every student to put in a year of national service at the end of his educational career and no person should be appointed to a regular post in the public or organized private sector unless he produces proper evidence of such satisfactory service. I realize the immense organizational and other problems involved in this proposal. But they have to be squarely faced and overcome.

I would also like to emphasize that there should be an early end to the dual system which we now run at all stages under which the classes have access to a small group of high quality elite institutions while the masses are compelled to study in public institutions of poor quality. At the elementary stage, the need for such institutions is the least and the best policy would be to adopt the common school concept recommended by the Education Commission. At the secondary and university stages, there is need to develop a core sector of good quality institutions. But care has to be taken to see that they do give access, in adequate proportion, to talented students from the masses and function as seed-farms to extend their excellence to other schools in the neighbourhood, their teachers and students.

Let me make a few observations about the problem of student unrest which has been attracting increasing attention,

especially since the developments in Gujarat and Bihar. The problem is complex and will need action on many fronts. Within the education system, steps will have to be taken to regulate enrolments in higher education, to improve standards, to raise the quality of administration, and to involve students effectively in planning and improving their own education. Side by side, attempts will have to be made, as suggested earlier, to involve students in effective discussions of problems of development and also to engage them in meaningful and challenging programmes of national or social service. It is, however, necessary to realize that unless the problem of employment is satisfactorily tackled, the problem of youth unrest (whether they are studying in secondary schools and colleges or have completed their secondary and higher education) cannot be controlled. This will involve a vastly quickened tempo of economic development and bold steps for enforcing an egalitarian national income and wage policy with full employment. These are not easy options. But palliatives or anodynes that may be adopted from time to time will only make the situation worse.

Motivating Students and Teachers

No radical reforms in education are possible, especially in the improvement of standards, unless the students are properly motivated and the teachers are enthused and deeply involved in programmes of educational reconstruction. As I have said earlier, the most painful aspect of the present situation is that, in a large proportion of class-rooms, the basic educational process does not take place at all; and unless this disturbing situation, which is tending to worsen, is substantially improved, we will not be able to reform education nor will education be able to contribute adequately to social, economic and political development.

The causes for the weak motivation of students at all stages are not far to seek. At the primary stage, a majority of students come from poor and illiterate families. Very often, they are not adequately fed or physically fit. They do not often have even the necessary tools of learning such as

textbooks or writing materials. This lack of motivation is further strengthened by unsatisfactory nature of the curriculum which is largely unrelated to local environment, the uninspiring and traditional methods of teaching which are adopted in most schools, and the faulty methods of examination which emphasize rote-learning. Most of these factors continue to persist at the secondary stage also, especially in rural areas. At the university stage where one needs the strongest of motivations and the best of preparation on the part of students, the overall picture is probably the least satisfactory, especially because we operate an open-door system in which every student who desires admission does succeed in getting it in *some* institution, however poor, and in *some* course, however useless. A study recently conducted by the Jadavpur University in West Bengal shows how serious the problem is. For instance, in the undergraduate course (pass degree) in Arts, Science and Commerce, only 8 per cent of the students were interested in getting a degree which, they thought, would help them to get a job. The proportion of motivated students increased to 36 per cent in the honours courses and to 61 per cent in engineering courses. But even at the postgraduate stage in arts, science and commerce, the proportion of properly motivated students was as low as 22 per cent. The syllabi were obsolete, unrelated to present-day problems and had remained un-revised from 6 to 25 years. The students often did not have the prescribed textbooks; and more than 50 per cent of them did not have even the easily available and recommended reference books. As many as 75 per cent of the students were dissatisfied with teaching methods and 85 per cent, with the examination system. About 75 per cent of the students found that the use of English as a medium of instruction was a partial or a great barrier to their understanding of problems and development of deep interest in their subject.* The picture becomes even more depressing if we take into consideration the non-involvement of the average student, in spite of his age and maturity, in the

* Tapan Chatterjee : *Social Stratification and Education in West Bengal*, Jadavpur University, 1974

planning and development of his own education, his continuous and deep anxiety regarding his future and the immense disturbances in studies caused from time to time by incidents of unrest. Barring a few exceptions, the conditions in most parts of the country are similar. The remedial reforms for improving student motivation are implicit in this analysis ; and they will have to be adopted on a priority basis.

Equally urgent is the need to enthuse teachers and to involve them closely in programmes of educational reconstruction. During the last twenty-seven years, a good deal has been done to improve the remuneration, general education and professional training of teachers. They are now much better paid than in 1947. A further improvement in the situation, however, seems to be possible only on a radical basis, namely, the fixation of minimum and maximum incomes for all occupations on an egalitarian basis and revising the remuneration of all public servants in keeping with the needs of capital accumulation and national development. The general education and professional training of teachers has also considerably improved, although there is immense room to improve methods of selection and an urgent need to provide continuing in-service education. The weakest development, however, has been in those programmes which give autonomy and freedom to the teacher, enable him to take initiative and to experiment, and involve him deeply in programmes of educational reconstruction. Our educational system is still centralized, authoritarian and rigid and is tending to be more so. The curricula are still largely determined by the State Education Departments, without involving the teachers, and the schools have little freedom to change them. The methods of teaching get largely determined by the dominance of external examinations ; and neither institutions nor teachers have the authority to depart from superimposed prescriptions. There is, therefore, an urgent need to make the whole system elastic and dynamic and to move in the direction of conferring educational autonomy on all educational institutions. A system of institutional planning must be introduced universally so that teachers, students and parents are closely involved in the development of each

educational institution.* Similarly, there should be institutional arrangements, involving teachers, for planning and development of education at the level of the School Complex (or a group of schools within easy accessible distance), Block, District and State. A similar programme is also needed at the university stage. There has also to be a deliberate and massive effort to encourage initiative and experimentation on the part of schools and teachers. Even after twenty seven years of independence, the teacher has not got his freedom within the education system. We can continue to deny this right to him only at immense peril. Let us not forget that unless the teacher becomes free, the student also will not get his freedom to grow at his own best pace and in his most desired directions.

It is also necessary to remove certain irritants if teachers have to contribute their best to the reconstruction of education. In the private educational institutions, teachers have to undergo several hardships which involve unlawful cuts in remuneration, harassment of various types and insecurity of service. The complaint of harassment is most often voiced by teachers under local bodies. Even in the services of the State Government, harassment of various types, especially through transfers and postings, is quite common. These are admittedly difficult issues. But unless they are solved satisfactorily through the involvement of teachers, it would be unrealistic to expect them to work enthusiastically in programmes of educational reconstruction.

If the teachers are enthused and deeply involved in programmes of educational reconstruction, it will be possible to develop those programmes of qualitative improvement which need human effort inputs rather than large investment of funds. These really form a package deal and include : improvement of curricula ; examination reform ; improvement of textbooks and other teaching and learning materials ; improvement of supervision ; and all-out encouragement to experimentation and innovation. The preparation of good quality textbooks written by Indian authors for all courses

*For details, please see Appendix III.

at the undergraduate stage and for most purposes at the postgraduate stage would be an important programme to be developed in this context ; and equally important would be the preparation of textbooks and other educational materials for higher education in the modern Indian languages. A large injection of these human efforts will raise educational standards within a short time and at a level of financial investment which would be available even in the meagre plan allocations now made.

Finance

On the financial side, substantial economies in the total cost of education will result from the radical reconstruction proposed here in the traditional system of formal education through the introduction of programmes of non-formal education on a large-scale. There would be further economies if we abandon the present emphasis on professionalization of teaching by harnessing the services of suitable persons from the community, preferably on a part-time basis, to develop pre-school education, to work as helpers at the primary stage, to serve as craft or specialized teachers in schools and for promoting programmes of out-of-school youth. The use of students as teachers as an integral part of their own education can lead to still further economies.

I would strongly urge that the earlier tradition of ignoring all non-plan expenditure for purposes of development should be abandoned. In a field like education, this approach is not very helpful, especially because, as time passes, the non-plan expenditure tends to grow and the plan expenditure tends to decline. For instance, in the Fifth Five-Year Plan, the proposed plan expenditure on education is only Rs. 1726 crores. As against this, the non-plan expenditure would be Rs. 6,750 crores (at Rs. 1,350 crores per year). After all, the distinction between the non-plan and plan expenditure is largely an accounting matter and it would be more appropriate to consider the total educational expenditure for purposes of educational reconstruction. For instance, in elementary education, it would be wrong to think that it is

only plan expenditure for appointment of additional teachers that can secure expansion. Even a small increase in the teacher-pupil ratio or the adoption of the double-shift system can expand the coverage of the system very considerably without any addition to plan expenditure. Let us not forget that the non-plan expenditure on education is very large and that it is next in order only to that on defence. We must initiate a new system of thought under which the entire educational expenditure—plan and non-plan—is taken into account while planning programmes of educational reconstruction.

The emphasis on finances from government funds has been continually increasing. It may be worthwhile to explore, in the years ahead, how finances from sources other than government funds could be made available for education. In particular, our policies in regard to fees will have to be re-examined ; and innovations for harnessing local support, financial and otherwise, for educational development will have to be promoted.

In the last twenty-seven years, our general policy has been to under-emphasize human effort inputs and try to compensate for this failure by monetary investments. This is not a policy for a poor country. We should now reverse it and emphasize human effort inputs, so that the need for financial inputs is considerably reduced.

Wanted : A Proper Developmental Climate

What I have suggested here in the short time at my disposal amounts to a very radical reconstruction of the educational system. Such revolutionary reforms need the mobilization of immense human efforts and the cooperation of almost the total population of the country. They cannot therefore, be implemented unless a climate of enthusiasm and optimism is created and sustained among all the groups which are concerned with educational reconstruction, viz., students, teachers, parents and educational administrators. This is the real crux of the problem. When such a developmental climate does *not* exist, even the best of teachers and

schools find it difficult to make their proper contribution. On the other hand, if such a climate can be created, even the weakest of schools and teachers will contribute much beyond their expected performance. The basic issue before us therefore, is this : Can we really do it ?

If prices are stabilized and the implementation of a proper plan is vigorously undertaken, the social climate will begin to change in favour of development. But this is not enough. Educational agencies and educators will have to build on this foundation and create the necessary climate for putting across the type of educational reconstruction which has been outlined here. Several major steps will have to be taken from this point of view. The Centre (which will include not only the Ministry of Education, but the UGC, the NCERT, and the National Staff College for Educational Planners and Administrators) will have to provide a stimulating but non-coercive leadership. The State Governments, on whom the Constitutional responsibility for education ultimately rests, will have to show the vision, will, courage and sustained efforts needed to bring about radical changes. Effective academic leadership will have to be provided by the universities and the State Education Departments. The deep involvement of the teachers will have to be sought, as I have suggested, through giving them their due place of leadership in the programme and through the provision of satisfactory conditions of work and service. The motivation of the students will also have to be heightened through close personal contacts, appropriate curricular changes, adoption of dynamic methods of teaching and evaluation and above all, by provision of suitable employment opportunities at the end of their educational career. Parental understanding and cooperation will have to be invoked through appropriate educational programmes. This may appear a tall order, especially in the present general climate of cynicism and frustration. But I don't think that it is beyond the capacity of the national and educational leadership of the country. I also don't see why this developmental climate cannot even begin in education and then spread to other areas.

The Faith of an Educationist

In spite of the prophets of doom who seem to have now become more vocal, I have always been an incorrigible optimist and I do hope that a reconstruction of education on these lines will be attempted, sooner rather than later. This is because I have an unshakable faith in my people and in my country. What is equally important is my faith in education itself. This can best be expressed through a story which the late Dr. K.G. Saiyidain was fond of telling. It begins with a learned professor who was expecting an important visitor and who did not want his irrepressible talkative daughter to disturb their conversation. So he picked up a difficult jig-saw puzzle—it was a map of the world cut into more than a hundred pieces—and asked her whether she would be able to put it together. To his pleasant surprise, she accepted the challenge and he felt happy that he had quietly 'disposed' of her for at least half a day. But imagine his astonishment when she returned a few minutes later with the puzzle fully solved. "My God", he exclaimed, "how could you do it?" "That is very simple, daddy", She replied with a disarming smile, "you see, I knew that, on the other side of the world map, there was a picture of a man which was much easier to put together ; and I also knew that if I got the man right, the world will be alright". With this sweet memory which reminds me of Dr. K.G. Saiyidain and his faith, let me say good-bye and thank you.

one class in which fresh admission can be given, namely, class I.

3.07. This system has the obvious advantage that it tends to create a homogeneous age-group cohort in Class I which tends to rise, year after year, to successive classes, and which makes class-room instruction comparatively easier. But it has its disadvantages also. For instance, what happens to a rural child who does not get into Class I at about the age of 11 ? In practice, this child can never get into school again and he will have to live and die as an illiterate adult. All that we can say to this child is "Sorry, my boy. You have unfortunately missed the bus. But when you grow up, get married and have a child, bring him along when he is six and we shall be happy to admit him in Class I." If, by some misfortune, this child were to miss admission in Class I at about the age of six, we are prepared to wait patiently for the grandchild. It is this approach of providing a single-point entry to the entire educational system that makes it so ineffective in practice.

3.08. What happens to a child who desires to learn at a little later age, say, 11 or 14 ? It is true that such a child can and is also admitted to primary schools. But the admission is made invariably in Class I and this grown-up child is required to sit along with other very young children, learn the same lessons, and at the same speed. This is usually very boring to this grown-up child who, more often than not, runs away from the school and becomes a 'drop-out'. What such a child needs is specially-organised classes where primary education is imparted through special techniques suited to his more mature mind. But there is no provision in our system for this purpose.

3.09. It is obvious that our educational system would gain infinitely if it were to provide, not a single-point entry at about the age of six, but multiple-point entries at different ages, say, 9, 11, 14 or even 17. The desire to learn may spring up in the minds of children at any of these later ages : and our system should be elastic enough to admit them into primary schools which are specially organised and where

APPENDIX I

Structural Changes Needed in the Existing Formal System of Elementary Education

3.04. A major implication of the decision to provide universal primary education in the age-group 6-14 in ten years is that the necessary radical transformation in the traditional model would be carried out without delay. The traditional model for the development of primary education was essentially meant for the well-to-do classes who appreciate the value of education and are also in a position to feed, clothe and equip their children to attend schools on a whole-time basis. It has, therefore, a built-in bias in favour of the education of the classes and a built-in antagonism for the education of the masses. It is this basic issue which often goes unrecognised and needs clarification.

3.05. The existing primary schools may be regarded as a single-point entry, sequential, and full-time system of institutional instruction by full-time and professional teachers. It is necessary to analyse each of these attributes in some detail.

3.06. *Single-point Entry* ; Ordinarily, a child is expected to enter the primary education system at about the age of six (or even five in some States) in class I. It is true that children below or above this prescribed age of first admission are also allowed to join class I. It is also true that children who have studied privately may be examined and allowed to join, according to their abilities, in a class higher than the first. But such admissions of underage or over-age children in class I or in classes other than first are exceptions rather than the rule ; and it would be correct to say that, for the average child, especially in the rural areas, there is only one age of entry, namely, six or five, and only

instruction is imparted on lines which are more suited to their maturity. Such alternative channels of admission would bring, into the school system, large numbers of children who now remain out and add merely to the numbers of illiterate adults. It is also obvious that such a system would be far more effective from the point of view of the spread of literacy among the masses than the present model of a single-point entry at Class I at about the age of six.

3.10. *Sequential Character.* The existing primary schools are also a sequential system in the sense that a child is expected to complete one class every year and to rise to the next higher class after passing the annual examination. There are, of course, large exceptions. Many children fail to pass the examination at the end of the year and are, therefore, detained in the same class as repeaters. The extent of this evil, generally known as stagnation, is very large in our system at present. On the other hand, a few children may complete two classes in a year and be given a 'double' promotion. But such cases are extremely rare. By and large, therefore, the system functions in a sequential manner and children rise every year from class to class.

3.11. The primary objective of this system again is to facilitate class-room instruction by grouping children of similar attainments together. This purpose is admirably served no doubt. On the other hand, it does not meet the needs of children who begin late. For instance, it has been shown through practical experimentation that grown-up children of 11 or 14 years of age are able to complete the studies of Class I-V in about two years. Very often, grown-up children of 14 to 18 years of age are able to complete the course prescribed for Class I-VIII in a period of 2-3 years and pass the Primary School Leaving Certificate Examination creditably. Programmes of this type are obviously very useful and suitable for conditions of a developing country like ours. But these have never been developed, except in a few experimental projects conducted by well-meaning and forward-looking educationists.

3.12 *Full-time instruction :* Another important aspect of the existing primary schools is that they only provide full-time institutional instruction. This of course does not create any problem for the classes who are economically in a position to feed, clothe, and equip their children to attend full-time schools. But the system is extremely antagonistic to the interests of the masses who are so poor that their children are compelled to work at home or outside and to add to the meagre family budget. Every boy is generally required to work as soon as he grows up and becomes about nine years old ; he works on the family farm, tends cattle or goes out to earn some wages in whatever way possible. A girl is required to assist her over-burdened mother and to look after the younger children who keep continually coming in. It is impossible for those children to attend schools on a whole-time basis ; and that is why they either never go to school or generally drop out, sooner rather than later. These hard-economic factors are the principal reasons for the large wastage which now afflicts primary education and account for about two-third of it or even more.

3.13. This wastage can be overcome in a variety of ways. For instance, the standards of living of the common people may be so raised that they are also in a position to feed, clothe, and equip their children to attend full-time institutions. The society may provide cash grants to the parents of such children to compensate them for their foregone earnings and then compel them to send their children to schools. Alternatively, a system of part-time education can be organised so that all such children, who are required to work in or for their families, may be able to earn as well as to learn. It is obvious that the first of the methods, however laudable, can only be a long-term solution. The second is financially beyond the reach of government at this time and for years to come. The only practicable alternative therefore, is the third, namely, to organise a large-scale programme of part-time education for working children. Today, our motto is that either the child attends the school on a full-time basis or is compelled to drop out. This heartless system—heartless to the poor man's child—has no place in

a country like ours where the vast bulk of the people are so poor. It should be replaced by another in which every child is required to attend school on a full-time basis, if possible, and on a part-time basis, if necessary. The hours of part-time instruction in such a system can also be organised in a manner that would suit the working conditions of the children and enable them to educate themselves without interfering with the essential work which they must put in for their families.

3.14. *Exclusive utilisation of professional teachers* : Yet another aspect of the existing primary schools is that they utilise the service of full-time professional teachers only. This is done in the name of standards and no one would quarrel with the attempt to utilise full-time professional teachers. However, an exclusive dependence on this pattern creates several problems. The first is a continuing increase in costs because the inescapable consequence of such professionalization is a rise in salaries and allowances of teachers (which increases cost per teacher unit) and a continuous reduction in the pupil-teacher ratio (which increases cost per pupil). Moreover, the very cause of quality often, suffers because of this emphasis. It has been suggested, for instance, that the standards in the primary schools would improve if they utilise local talent and teaching resources e.g., a local carpenter or a tailor may be used to teach a craft in primary schools or a local good singer may be utilised for teaching music. It is not necessary that such teachers should necessarily be qualified from the strictly professional point of view and it is also possible to make them good teachers through short programmes of orientation. But such efforts are never made. The costs of primary schools may also go down if pupils themselves are utilised for purposes of teaching. In the traditional indigenous schools of India, for instance, the monitorial system was a very common feature under which pupils were paired off and a senior pupil was required to take charge of instructing a junior pupil entrusted to his care, under the general guidance of the teacher. Such a system or its variations can give excellent results, especially in single teacher schools or in schools

where it is not economically feasible to provide one teacher for every class. In several areas, it is also possible to use local young persons to assist the teachers of local primary schools in educating the children of the community and pay them small allowances which would be extremely valuable in the local conditions, but which would, nevertheless, reduce the overall costs of education to a substantial extent. But these devices also remain un-explored. What is worse, whenever such proposals for the utilization of non-professional teachers are put forward, the entire organisation of the professional teachers rises up in revolt and sees to it that they are neither adopted nor allowed to succeed.

3.15. One other point needs mention : our primary schools have no pre-schools or creches attached to them. The most common work which girls from poor families are required to do is to look after young children. On the one hand, we are anxious to promote girls' education and organise a number of programmes to increase their enrolment. On the other, we do not permit girls to bring young children with them and request them to leave them at home before coming to school. Since this is impossible, the practice means only one thing ; the girls are prevented from joining primary schools and there is a positive disincentive in the system against the spread of education among girls from poor families. Experiments have been tried, notably by the late Smt. Tarabai Modak, wherein small creches or pre-schools were attached to primary schools and were conducted by the girls themselves under the general supervision of the teachers. The additional costs involved in the programme were marginal, but they succeeded very well in enrolling a large number of girls from the poorer families. This elasticity of organisation is absent in the model that we have developed and consequently, the development of education of girls from the masses is considerably hampered.

3.16. *The Changes Needed* . It is thus obvious that the existing model of the primary education system favours the well-to-do whose children complete the primary course successfully (their main objective is secondary or higher education for which they look upon primary education merely as

inevitable stepping stone) and harms the interests of the masses, the bulk of whose children are converted into 'failures' and 'drop-outs'. If primary education is to be made universal, we recommend that the traditional model of the primary education system should be radically modified on the following lines to make due provision for the education of the children of the masses :

- (1) The single-point entry system must be replaced by a multiple-point entry system under which it will be open for older children of 9, 11 or 14 to join the primary schools in separate classes specially organised for their needs.
- (2) The sequential character of the system must go ; and it should be possible for older children to join the prescribed courses at any time and also to complete them in much shorter period.
- (3) The exclusive emphasis on full-time institutional instruction that is laid in the present system should be replaced by a large programme of part-time education which should be arranged to suit the convenience of children who are required to work.
- (4) The exclusive emphasis on the utilisation of full-time professional teachers should go. An attempt should be made to utilise all the teaching resources available in the local community ; and the services of part-time local teachers and even of senior students should be fully utilized for promoting instruction in the primary schools.
- (5) There should be no rigid demarcation between primary schools and pre-schools. Girls who are required to look after young children should be encouraged to bring them to the school. These could be taken care of in pre-school or creches attached to the primary schools which are managed by the girls themselves, by turns, under the guidance of the teachers. This will provide a valuable service at the minimal additional cost and assist materially in the

spread of education amongst girls from the poorer families.

These major structural changes should be carried out on the basis of highest priority. This alone can help us to implement the directive of Article 45 of the Constitution over the next ten years.

3.17. This recommendation, let us incidentally point out, is in line with the latest trends in world education where the exclusively formal systems are being currently blended with large programmes of non-formal education to meet the needs of modern and changing societies and to provide the base of a new system of life-long education for all. Even at its best, a formal system of education with its single-point entry, its sequential promotions from class to class every year, its exclusively full-time courses, and its professionalised body of teachers, has several limitations. It can serve only the non-working population which is the smaller and less effective section of the total population. It offers no help or a second chance to those unfortunate children who miss its narrow doors of admission or who are compelled to step off it for social and economic reasons. It contributes only a small proportion of the total education which an individual receives (the bulk of this comes from the home, the society at large, and the personal and working life of the individual himself). It has also a tendency to become a vested interest and help to perpetuate privilege or conformity rather than to promote equality or healthy dissent. At the same time, its cost continues to mount till a point is reached when even the most affluent nations begin to feel that they are beyond their reach. To overcome all these difficulties, an attempt is now being made, all over the world, to abandon the traditional obsession with the exclusive use of the formal system of education and to blend it fittingly with the non-formal system. This is being done, not only at the first, but at all stages of education. We shall therefore be in good company and on sound footing if we introduce this reform in India at the primary stage. We understand that similar steps are also being taken at the secondary and university stages.

Implications of these Modifications

3.18. What are the precise implications of these proposed modifications in actual practice? The first is that we need not make any special effort on expanding the formal system of education, although all natural demands for its expansion should be fully met. As it is, a certain expansion of the system is inescapable. Demands for new schools will arise and will have to be met. Every year, many new children will enter the school for the first time, and those who are already in will strive to stay longer. This is the result of a general improvement in the economic conditions of the people and in the awakening of the masses which is continually taking place. There is thus a natural increase of 3-5 per cent in full-time institutional enrolments. All such natural demands should be fully met. But there is no need to make any extra effort to fan this demand artificially—it only adds to the wastage in the system. Moreover, this increase in full-time enrolments is only from the better off classes and as their needs have already been more than well met, no special efforts in the direction are called for.

3.19. We are making this recommendation for important economic considerations. Full-time attendance in schools is possible only for children who come from well-to-do families which do not need their labour for balancing the family budget. Such children are in schools even now (except for girls in some areas). What is needed therefore is an intensive effort to improve the economic condition of the masses of people. If this were to be done, the problem of enrolment of children in schools on a full-time basis would be comparatively easier. But as this is a long-term programme, we must assume, for the time-span of the next ten years with which we are concerned, that the children of the masses will not be able to attend schools on a whole-time basis. If we try to bring them into schools on a full-time basis before the economic condition of their families is improved, we will have to spend considerable money and energy on propaganda and 'incentives'; and in spite of all this, the effort will only result in a nominal enrolment and

lead to an increase in stagnation and wastage.* Instead of this costly and futile effort, therefore, it would be far more desirable to concentrate, in this transitional stage, on providing part-time education for children of the poor people. The programmes would shrink naturally and disappear within a few years as the economic conditions of these people improve. It should be noted that, even in England, part-time education in the age-group 6-10 was allowed till about 1900 and, in the age-group 11-14, till 1918.

3.20. The second implication of our proposal is that special and intensive efforts should be made to spread primary education, on a non-formal basis, and especially among the poorer sections of the people and among girls. The largest expansion effort in the Fifth Plan should be in this sector. This effort should be made in two directions: (1) special classes of 18 to 24 months duration should be organised, on a part-time basis for all children in the age-group 9-14 who either did not go to school or dropped out after a short period of school attendance. These classes would aim mainly at the attainment of functional literacy, and (2) part-time classes should be organised, on a purely voluntary basis, for all children who have completed class V, who desire to study further, but who cannot do so on a full-time basis.

*This is especially important. We do feel that the over-emphasis now placed on "incentives" leads to an inordinate increase in costs and is proportionately counter-productive of results because what we are trying to do—full-time enrolment of children who are under a compulsion to work—is economically unfeasible. This does not mean that no incentives are needed. Free books and materials will have to be supplied and we have assumed that this will be done. School meals are a separate problem. A child should be entitled to a square meal whether at school or not. We have therefore assumed that the programme of school meals will be treated as a part of 'nutrition' expenditure and not as 'education' expenditure (the Planning Commission has rightly done so in the Fifth Plan). In order to avoid semantics, however, our estimates of costs do assume the provision of school meals to about 10-20 per cent of the children—both in full-time and part-time classes.

3.21. Hardly any comments are needed on the second of these proposals, viz., the part-time continuation classes at the upper primary stage for children who have completed class V and cannot continue to study further on a whole-time basis. The only problem is organization and even this is comparatively simple because these classes would be run on a voluntary basis for the next ten years. The teachers could be primary teachers or other local helpers. The buildings and equipment of the existing primary (or even secondary) schools would serve the purpose. Much larger in scale and more important are the classes for the older children in the age-group 9-14 because we wish them to cover ultimately all children in this age-group who are not attending schools or are not functionally literate. These could be organised, through all locally available persons (primary and secondary teachers, students of secondary schools, local voluntary workers, etc.) and their basic objective should be to make the children literate and to give them general education, through talks and discussions, equivalent to class V. The physical target should be to cover 80 to 90 per cent of the boys and about 40 per cent of the girls in the Fifth Plan. The entire population of boys and girls should be covered in the Sixth Plan so that, beyond 1984, no person shall reach the age of 15 without being functionally literate. The programme may begin on a voluntary basis but should soon be made compulsory. As the Education Commission has rightly pointed out, the number of children under instruction under this programme can only decrease year after year and it may be expected to vanish by 1984. It is also obvious that this will make the largest contribution to literacy at minimal levels of investment.

3.22. The new educational system these changes will create may be described as follows :

- (1) Every child will be free, as at present, to join the system in class I at about the age of six, and continue, on a full-time basis, till he completes class V or class VII. But this will not be the only exclusive channel of education.

- (2) Children may join, not in class I at about the age of 11, and on a full-time basis, but later, at any time in the age-group 9-14, on a part-time basis, in special classes and become functionally literate in 18-24 months. Children who have dropped out before becoming functionally literate may also join these classes and become literate.
- (3) Children who have completed class V and cannot continue to study further on a whole-time basis, may still continue their studies, if they so desire on a part-time basis.
- (4) Every effort will be made to bring all children in the age-group 11-14 (who are not attending schools nor have become functionally literate) in special part-time classes described in (2) above during the next ten years so that, beyond 1984, no child shall reach the age of 15 without being literate.

The present system of primary education, because of the large prevalence of wastage, makes only a small contribution to adult literacy. This new system will obviously make a far more significant contribution to adult literacy.

3.23. It may be of interest to point out the precise differences between the existing and proposed policies :

- (1) The present policy is to *enforce* enrolment, on a full-time basis, in the age-group 6-11 which, because of the large prevalence of wastage, really amounts to the enforcement of enrolment in the age-group 6-9. The new policy would be only to *encourage* enrolment, on a whole-time basis, in the age-group 6-11 and to meet all the natural demands that may arise for it.
- (2) The present policy is to consider universal enrolment in the age-group 11-14 *after* universal enrolment in the age-group 6-11 has been achieved. This becomes inevitable because of the sequential character of the

education system. In the new policy, an attempt would be made to make education universal in the age-group 11-14 *side by side* with the expansion of facilities for the age-group 6-11.

- (3) The emphasis thus shifts from enforcing enrolment and attendance in the age-group 6-9 to the enforcement of enrolment and attendance in the age-group 11-14, ordinarily on a part-time basis. This is more economical and effective. The late Dr. Zakir Husain used to say that, if he had money to provide only three years of education for the children of the country (and this is precisely the position at present), he would rather make education universal in the age-group 11-14 than in the age-group 6-9 because the grown-up child will learn better and faster and remember things much longer. He also emphasised that the Constitution specifies the age of 14 as the upper limit for universal education and does not mention the lower age limit. He therefore argued that compulsory education in the age-group 11-14 would satisfy the Constitutional directive while that in the age-group 6-9 or even 6-11 would not. It is this sound policy on educational and constitutional grounds that is proposed to be given effect to in these recommendations.

(Extract from the Report of the Working Group of the CABE on Universal Primary Education in India).

A Programme for the Education of Out-of-School Youth in the Age-Group 15-25

Need and Significance

Investment in education is necessarily long-term and begins to yield results after a generation and, in some cases, even after a longer period. Developing countries, however, are pressed greatly for time ; and hence an important issue is educational programmes which can yield quicker and almost immediate results. If such programmes can be identified and implemented, those developing countries that will get a much better and quicker return for their investment in education will stand most to benefit.

Several programmes of this type can be suggested : adult literacy, on-the-job training of industrial workers, agricultural extension, and so on. But of all these, probably the most significant and far-reaching would be a crash programme for the education of young persons in the age-group 15-25. The size of this group is large, about 25 per cent of the total population. Its members are generally alert, inquisitive, impressionable, and capable of being inspired by emotional commitments to service of the people and the country. As educands, therefore, they offer rich and potential material that is much easier to handle than either children of younger age or adults. What is more important, the cost of an educational programme for them are comparatively less (for such education is necessarily part-time) and its returns immediate and effective because these young persons will become active and influential members of the society in five to ten years.

If society had funds enough to provide only about eight years of universal education for every individual, what would

be the period of life in which these funds could be invested? This is one of the most fascinating problems in educational planning. Some suggest the age-group 3-10 and also make out a strong case for it on psychological and physiological considerations. Others would vote for the age group 6-14, an age-group that our Constitution has also identified for providing free and compulsory education. But there are yet others who would plead for the age-group 14-21, especially in developing countries, on the grounds that the costs of educating this group would be smaller and the results quicker and more effective. It is neither possible nor necessary to arbitrate between these different viewpoints. We as a nation have made our choice and have decided that the main thrust of our educational effort should be with the age-group 6-14. There is no need to alter this decision. But what we must do is supplement it by a large-scale crash programme for the age-group 15-25, which includes the age-group 14-21. It is, therefore, strongly recommended that a massive programme for the education of this age-group should be developed during the seventies. The next three years should be fully utilized for organizing pilot projects on a fairly big scale and for building up the necessary expertise, training of personnel, and production of materials. The programme should then be given a big place in the Fifth Five-Year Plan.

Content and Character of the Programme

A small proportion of the young persons aged 15-25 are undergoing full-time education at present at different levels—some at the primary, a majority at the secondary, and some at the university stages. But, taken all in all, the enrolment of this age-group in all categories of educational institutions does not exceed about 10 per cent of their total population. No proposals are made here regarding the education of this small group already enrolled in schools and colleges. The normal programmes of educational reform would take care of their needs. But what we are concerned with most, in this paper, is the development of an educational programme for the out-of-school youth who form the other 90 per cent of the age-group and who

are at present without any educational facilities whatsoever. It is for them—and they form about 18 per cent of the total population—that a large-scale educational programme has to be developed on a war footing.

The content and character of this programme will obviously depend upon educational attainments and needs of these young persons. Some of them may have completed secondary education and a few would even be university graduates. A much larger number would have received some primary education and may be expected to be literate with varying degrees of other educational attainments. But, during the next decade at any rate, a little more than half would be those who have not been to school at all or who left school too early to have attained functional literacy. The programmes to be developed for this group would therefore be at various levels—for a large proportion, at the primary level with an emphasis on functional literacy. But for another much smaller and more significant group, the education required would, in its content, be at the secondary level. A small minority of these may even need education at the university level.

It would, however, be wrong to assume that continuing general education alone would be strong enough to attract and hold these young persons and meet their needs. General education will be a necessary component of the new programme, no doubt. But by itself it would not have the necessary vitality. It must be remembered that most of these out-of-school youth are workers, engaged in some activity that enables them to earn a living or to help their family to make both ends meet. Even though they are technically non-workers, they are sharing full responsibilities of the normal work in their families. The focus of their interest is therefore vocational; and what will attract them most is the prospect of improving their present vocational skills so that they can earn a little more, or of learning some new vocational skills that will enable them to improve their economic status. A strong vocational element will therefore have to be built into all educational programmes proposed to be developed for this young group.

Given this strong vocational core, it will be possible to build several other educational elements around it that by themselves would not be strong enough to attract and retain these young persons. The first, as stated above, is general education. The second important component would be family life education, including family planning. Most of the persons in this age group would be married, especially in rural areas, and a programme of family life education will interest them most and would also be extremely beneficial. It is also obvious that it is this group, just entering the procreative stage of life, that needs to be exposed to education in family planning. Unfortunately, the family planning worker does not reach them or become effective with them for sheer absence of a continuing channel of communication. The chances of the family planning programme's succeeding and becoming effective are therefore the largest if it is operated as a part of a comprehensive educational programme for out-of-school youth.

Two other important educational elements can also be added with advantage. The first is the recreational and cultural interest of youth, and the second is their willingness, or even eagerness, to participate in meaningful programmes of nation-building or social service.

It is thus proposed that what these young persons need is a mix of several educational elements—a mix that will have a strong vocational core round which will be built up other important educational interests, such as continuing general education (including functional literacy, where necessary), family life education (including family planning), promotion of recreational and cultural pursuits, and participation in programmes of social service or national development. The nature of the mix will vary from group to group, and even in the same group, from time to time. The success of the programme will largely depend upon the manner in which its organizers are able to visualize and provide the precise mix that a given group needs at a particular moment.

It must also be pointed out that this will essentially be a programme of part-time education because most of the per-

sons to be educated are employed in one way or another. Those who are unemployed and are able to join on a whole-time basis will have two options : to join any existing educational institution of their choice on a whole-time basis, or to participate in this programme on a part-time basis. But for several reasons, this will only be a part-time programme.

It will be necessary to carry out careful surveys of young persons in a given locality to find out not only what their interests are but also what the times are when they can conveniently receive instruction. The success of the programme will obviously depend as much upon the conformity between the hours of instruction and the leisure time of the youth as upon the 'fit' between its content and their needs and interests.

Part-time classroom instruction would thus be the most important technique. But it should not be the sole technique. It will have to be supplemented, wherever necessary, by correspondence education, education through mass media like the radio and the film, and full-time intensive instruction of comparatively short duration provided in specially arranged residential camps. All these different techniques will have to be mixed appropriately to meet the needs of each group from time to time.

Agencies

What are the agencies through which this programme can be developed ? It will be a fatal mistake to try to create a new agency for the programme. Such a proposal will be extremely costly and will also take too much time. Our policy should, therefore, be to create only a new organization for the programme, and to utilize for its purposes all the resources both human and material of all existing institutions as well as the educational resources available in the community itself, which often go untapped. This is the only economic and practical method of attacking the problem in a massive way and without much loss of time.

The focal agency that should be harnessed for this programme is the huge infrastructure we have created for the education of children and the young—namely, our primary and middle schools, secondary schools, colleges and universities, and vocational institutions of all categories. We have now about 550,000 primary schools, about 120,000 middle schools, about 50,000 secondary schools, about 120,000 middle schools, about 50,000 secondary schools, about 4,000 colleges, nearly 100 universities or university-level institutions, and some thousands of vocational institutions both for agriculture and industry. They have among them about 2.5 million teachers, thousands of buildings, and equipment valued in ten millions of rupees. These are vast resources that must be utilized for this programme on a part-time basis. There is also the special advantage for this programme that most of these out-of-school youth will have been at some time students in these schools. It is therefore suggested that these institutions should be the centres round which the new programme should be built, and that their teachers, equipment, and buildings should be fully utilized. This will not create any conflict between their normal programmes and this new part-time programme. If steps are taken to pay additional remuneration to teachers for the extra work they will have to do, it will be possible to mount this programme at a minimal cost and in the shortest time.

Important as the role of these educational institutions is in this programme, it is necessary to realize that the cooperation of several other agencies has also to be secured in its proper development. The core of the new programme has to be vocational, and for this the present educational system is not adequately equipped. In addition to the resources that all existing institutions of vocational education can bring to bear, it is necessary to enlist additional support through all other available organizations; for example, the agricultural universities, the Gram Sewak training centres, and the demonstration or seed farms of the agricultural departments can provide valuable resources for education in agriculture. The Industrial Training Institutes can provide a very good base

for education in industry. The personnel of the Health Department, institutions of medical education, and the hospitals and dispensaries can add their resources for the development of family life education, including family planning. Several other departments of government can also make their own significant contributions, and it will be necessary to rope all of them into the programme.

Not only this. The large educational resources that the community has, and that generally go untapped, will have to be utilized. For instance, retired teachers can be of great help. The private medical practitioners may have to be involved in courses in family planning. Private industry should also be required to assist and participate. The services of individual craftsmen and other skilled workers, who may be managing their own business, could also be requisitioned on a part-time basis. Sportsmen and artists living in the community can be harnessed to provide for recreational and cultural needs. And so on.

It is claimed that in any given area where the programme is to be developed, we will find not only the educational needs of the young but also several institutions and personnel who have skills and services to meet these needs. What is therefore needed is a survey of the educational needs and interests of the young, on the one hand, and of the institutional and human resources available in the community to meet them, on the other. The contribution of the organizer is to bring these two together in a meaningful manner. This, therefore, is essentially a problem not of a lack of resources but of a lack of the necessary vision and organization. It is these that we have now to emphasize.

In all countries where such programmes have been developed, it is found that the young themselves make very good teachers for the young. It should therefore be our policy, right from the start, to develop leaders amongst the out-of-school youth who will take increasingly upon themselves the growing responsibilities of this educational programme. This is also the reason why such a programme will provide special opportunities for compulsory national

service. If government desires to make national service compulsory for university graduates, the development of this programme can provide the necessary field experience; for on the basis of this alone, a meaningful programme of national service for university students can be developed.

Organization

What type of an organization will be needed for the development of this programme and how shall the programme evolve? These are the two important questions that we will have to answer.

It may be desirable to visualize, in the first instance, the organization required at the grassroots level. We may, therefore, take the district as a unit. What is visualized here is that there will be a special officer in charge of this programme for the district as a whole, with the necessary subordinate staff to assist him in the discharge of his responsibilities. This officer, whose responsibilities will be largely organizational, may belong to the Education Department. But he will have to coordinate the resources of all government departments if the programme is to succeed.

Once this officer is in position, the next thing to decide upon is the centres where the programme will start. As has been stated above, the centre will have to be some educational institution—either a college or a secondary school or even a primary or middle school. Ultimately, all these institutions will have to be involved. But to begin with, the district officer will have to take a quick survey and select a few institutions where the necessary leadership and interest is available. He might begin with about fifty to a hundred centres in a district. These may be spread in all parts of the district or may be selectively located in a few community development blocks.

Once the centres are selected, the next step would be to survey the local needs as well as the available resources. The survey of needs will include contacting every young person in the age-group 15-25 who is out of school and

asking him whether he would like to continue his education and, if so, what his principal interests and convenient times are. The survey of available resources will include collecting full information about all the institutional and human resources available in the community that could be utilized, on a part-time basis, for a programme of this type. If the survey is properly carried out (and the personnel carrying out the survey could be quickly trained in a workshop of about ten to fifteen days), a picture of a programme for the locality will emerge. It will be the young persons who are interested in further education, the type of training they need, and also the local agencies that can be mobilized. It will then also be possible to work out the financial estimates. These will obviously vary from place to place and also depend considerably upon the type or programme to be evolved.

In planning the programmes, the key factors are elasticity and an earnest effort to get a 'fit' between the needs of the individual and the facilities provided for him. While in theory an attempt has to be made to meet, as individually as possible, the needs of the different categories of youth, in practice it will generally mean that certain "group needs" will be identified and met in groups.

The overall attempt should be to provide, for each out-of-school youth, a programme of part-time education for one to two hours a day, five days a week, which will be equivalent to full-time education for three months in a year. In addition, he should be required to spend at least two weeks in full-time residential instruction. To begin with, the idea should be to get every out-of-school youth under the programme for a period of one year at least. Many of the young persons who are thus exposed will want to continue their studies further on an optional basis, and they should be given every encouragement to do so. Ultimately the programme should be able to provide about three years of such part-time education to all in this age-group.

Even in one year of part-time education, it is possible to include some upgrading of vocational skills, courses for

functional literacy where necessary, some general education in citizenship, family life education, and some provision for recreational and cultural activities. But something very worthwhile could be achieved if a young person were to continue under the programme for about three years.

The programmes for boys are comparatively easier to organize and the resources available for them, especially in terms of personnel, are larger. In the beginning, therefore, the programme will be largely meant for boys. But the importance of education for the girls should not be underrated and special efforts should be made, right from the start to meet their needs.

While a beginning can thus be made with about fifty centres in a district, it should be possible to expand to about two hundred centres in three or four years, and the entire district can be intensively covered during the next decade.

We should begin with at least one district in every State and in at least one block in every Union Territory. The expansion will follow certain obvious lines. Every year, new districts or community development blocks may be added. In a district that has already been selected, new centres can be added; and in centres that are already established, attempts can be made to increase enrolments and to deepen and diversify the programmes. The target should be that at the end of the Fourth Plan we should bring under this programme about 10 per cent—nine million—of the total population of out-of-school youth. If funds do not permit, the target may be reduced by 50 per cent. At the end of the Fifth Plan, the attempt should be to cover about 50 to 60 per cent of the age-group at least for a minimum period of one year. This will of course be continued, on a voluntary basis, for as long a period as practicable.

It may be an advantage to have an advisory committee at the district level consisting of the representatives of all agencies and departments that will cooperate therein.

If this basic structure at the district level is properly developed, coordination at other levels will not present any serious problem. At the State level, there will have to be a special officer of the status of a Joint or Additional Director of Education to look after the programme. There may be an advantage in having a State-level coordination committee to assist him. At the Central level, we might have a similar coordinating committee of the ministries concerned, with a special officer in charge of the programme located in the Ministry of Education and Social Welfare.

APPENDIX III

The Role of Teachers in Educational Planning and Development

We now have experience of four Five-Year Plans and three Annual plans. From the point of view of teachers, it may be said that they have never been actively involved so far in the formulation and implementation of any of these plans. All the plans of these eighteen years were prepared at the State and national levels so that the agencies primarily involved in their preparation and implementation were the Planning Commission, the Ministry of Education, the Education Departments in the Secretariates of the State Governments and the Directorates of Education in the States. It is true that the universities have been preparing their own plans under the general guidance and assistance of the University Grants Commission. But barring this solitary exception, no educational institution or their teachers, were ever intimately associated with the formulation and implementation of plans. The average college, for instance, has hardly been involved in the process. The secondary and primary schools were not involved at all and were even ignorant of the main programmes taken up in the plans. Since the education process takes place in the classrooms, a truly effective educational plan cannot be prepared without the active involvement of teachers and cannot be implemented without their full and enthusiastic co-operation. It may, therefore, be said that this non-involvement of teachers in the preparation and implementation of educational plans is one of the major weaknesses in our system and unless it is effectively remedied, it will not be possible to promote the development of education in a big way.

The principle that teachers should be actively involved in the formulation and implementation of educational plans is

unexceptionable and is accepted by all concerned. But its implementation in practice is held up on three main grounds. The first is that we have not yet been able to visualise and create the institutional machinery which will enable all teachers to effectively participate in the formulation and implementation of educational plans. The second is that there are several divisions in the ranks of the teachers which weaken the profession and diminish its capacity for active participation in this programme ; and the third is the general unconcern which the teachers themselves have shown so far in problems of educational planning and development and their failure to develop the necessary expertise and leadership. All these three weaknesses will have to be overcome if teachers are to assume leadership in educational planning and development and thereby benefit education as well as improve their own status.

The Adoption of a Broad-based and Decentralised Planning Process

The present system of educational planning is top heavy and resembles an inverted pyramid because most of the planning is done at the national and State levels only. It is necessary to decentralise and broad-base this planning process by the preparation of plans at two other levels—district and institution. The best results can be obtained only if an integrated process of planning at these four levels is evolved and planning descends from the top as well as arises from below.

I. Institutional Planning : The base of this new planning process will be provided by the institutional plans. I refuse to believe that one institution can be just like any other. On the other hand, I think that each educational institution should have a unique personality of its own like every individual student. The administrative system should therefore be such that each institution will be encouraged and assisted to plan its own individual development on the best lines possible.

The institutional plans will have several advantages. (They emphasise programmes of qualitative improvement) and, as

these will have to be increasingly emphasised in the years ahead, institutional plans will have to be an inescapable component of the planning process of the future. They will make it possible to involve not only teachers, but also parents and even students effectively in the planning process ; and what is more important, they will provide adequate scope for initiative, creativity, freedom and experimentation by teachers. They will also emphasise human effort rather than expenditure and thus serve to reduce the expenditure-orientation which our plans have acquired in the past.

It is necessary to develop a proper technique of preparing institutional plans. There is a real danger that the institutional plans may degenerate into 'charters of demands' which will be beyond the capacity of any Government to meet. This will have to be avoided and the institutional plans will have to be prepared as 'programmes of action' which the schools can undertake within their present available resources or with such additions to them as are immediately practicable. In fact, planning at the institutional level can begin with the question, What can you do even within the available resources or with some small feasible additions to them ? This question is rarely asked. But when one studies institutions closely, one finds that there is an infinite number of things which every institution can do even within the available physical and financial resources, if it can bring in a sense of duty, a lively imagination and hard work to bear upon the problem. For preparing institutional plans, therefore, it is this approach that has to be emphasised. As the Education Commission has said :

"Even within its existing resources, however limited they may be, every educational institution can do a great deal more, through better planning and harder work, to improve the quality of education it provides. In our opinion, therefore, the emphasis in this movement should be, not much, on physical resources, as on motivating the human agencies concerned to make their best efforts in a co-ordinated manner for the improvement of education, and

thereby offset the shortcomings in the physical resources. There are a large number of programmes which an educational institution can undertake on the basis of human effort and in spite of paucity of physical resources. These include : reduction in stagnation and wastage ; improvement of teaching methods ; assistance to retarded students ; special attention to gifted students ; enrichment of curricula ; trying out new techniques of work ; improved method of organising the instructional programme of the school ; and increasing the professional competence of teachers through programmes of self-study. It is the planning and implementation of programmes of this type that should be emphasised."

There is nothing new in this idea of institutional plans. There are a number of good schools which prepare and implement their own plans of development even now. In fact, an important criterion of a good school is that it does so. What is proposed here is that this process which is now confined to a few institutions and is entirely optional, should become general and be resorted to by all educational institutions.

What are the steps needed to introduce a system of institutional plans in a State ? The following suggestions in this regard are put forward for the consideration of the State Governments :

(1) It should be a condition of recognition and grant-in-aid that every institution prepare a fairly long-term plan of its own development. Against the background of this plan, it should also be required to prepare a Five-Year Plan (coinciding with the State Five-Year Plans) and an Annual Plan indicating the activities proposed to be undertaken during the ensuing year.

(2) These plans prepared by the institutions should form the basis of the periodical inspections. The object of these inspections should be to help the institution to prepare the best plans it can, within its available resources and to guide

it for their successful implementation. If this is done the present *ad hoc* character of inspection will mostly disappear.

(3) Some broad guidelines for the preparation of such plans should be issued by the State Education Department. These will indicate, in the broad terms, the policies of the State Government included in its own plans which will have to be reflected suitably in the plans of the institutions. It should, however, be clearly understood that the guidelines issued by State Government are recommendatory and not mandatory. It should be open to a school, for given reasons, not to take up a programme included in the guidelines, to modify the programmes given therein or even to take up new programmes not included in the guidelines.

(4) An even more important measure is to arrange suitable training in the programme for all inspecting officers of the State and for headmasters. This should essentially be a responsibility of the State Institute of Education.

(5) A long-term plan will be prepared by the institution to be covered in such a period of time which it deems convenient. The Five-Year Plans, as stated earlier, should be made to coincide with the State's own plans. For preparing the Annual Plans it is necessary to provide some specific time in the school year : and it is, therefore, suggested that about a week*, in the beginning of each academic year and a week towards its end, should be reserved for the purpose. The following steps may be taken with advantage :

- (a) The school should open for teachers on the prescribed day but the students should be required to attend a week later. In other words, in the first week of the opening of the school, the teachers should be on duty without being required to take classes. This period can then be conveniently devoted in continuous meetings and discussions and for preparing a

* This is indicative. The precise time could be even less and adjusted to the needs of the institutions.

detailed annual plan of work of the school in all its aspects : co-curricular, curricular, class plans, subject plans and detailed plans for each programme the school proposes to undertake.

- (b) Similarly, at the end of the year there should be a week when teachers are on duty but the students have been let off. This week should be utilized for a careful evaluation of the implementation of the Annual Plans.

The implication of the proposal is that the holidays for students will be about two weeks longer than for the teachers. This may appear as a loss of teaching time. But the gain in terms of quality of work will compensate it in full or even more.

(6) Reports of the Annual Plan prepared in the beginning of the year should be available to the inspecting officer within a short time thereof. The same should be done about the evaluation carried out at the end of the year. It should be an important part of the school inspection to discuss these plans and their evaluation with the school staff and authorities (and where necessary, even with students).

(7) An important point to be emphasised in institutional plans is successful implementation. A common tendency is to make ambitious plans which sound good on paper and then to implement them indifferently. This trend is also encouraged because the inspecting officers often compel schools to undertake a number of programmes. Thus begins ineffective implementation, inefficiency and slipshod work which undermine the utility of this programme which is essentially qualitative. To avoid these weaknesses, it should be clearly laid down that 'not low aim but failure is a crime'. It should be left open to the schools to make small plans, if they so desire and no attempt should be made to force ambitious plans on them. It should, however, be insisted that, whatever the plan, it should be implemented with the best efficiency possible. Even if the beginning is humble, the institution may, in the light of the experience gained and as

a result of the self-confidence which inevitably comes from successful implementation, take up more ambitious plans in future. A little patience shown to wait for such a development will yield rich dividends.

(8) In preparing the institutional plans, a clear emphasis should be laid on adopting the democratic procedure and on involving all the agencies concerned. It is true that this is basically a responsibility of the Headmaster or the Principal, but the Managing Committees of the institutions will naturally have an important role to play. The Headmaster must involve the teachers intimately. The local community will also have to be involved in many programmes. In some programmes, even students will have to be involved. This becomes all the more important as one goes up the educational ladder. It should be clearly understood therefore that the institutional plan is a sum total of collaboration of all these agencies involved. Several steps will have to be taken if this basic idea of institutional plans is to be successfully developed. Some of the more important of these are the following :

(1) The State Education Departments should be oriented to a new mode of thinking. Their present insistence on rigidity and uniformity should be abandoned in favour of an elastic and dynamic approach. They should also encourage initiative, creativity, freedom and experimentation on the part of institutions and teachers. It should be their responsibility to identify good schools and to give them greater support and large freedom to enable them to become better, while at the same time, providing the necessary guidance and direction to the weaker institutions with a view to enabling them to be good.

(2) Although the institutional plans have to emphasise human effort rather than additional investment in physical and monetary terms, it is also necessary to emphasise that the State Governments should strive to make more and more resources available to individual institutions through liberalisation of grants. Side by side, it is equally essential that

every institution should strive to raise its own resources for its development. From this point of view, the following three steps will have to be taken :

- (a) An Education Fund to be maintained in each educational institution, on the broadlines recommended by the Education Commission, assumes importance. The Commission has said that this fund should consist of (i) amounts placed at the disposal of the institutions by the local authorities ; (ii) donations and contributions voluntarily made by the parents and local community ; (iii) a betterment fund levied in institutions, other than primary schools, from students ; and (iv) grant-in-aid given, on a basis of equalisation, by the State Government.
- (b) The system of grant-in-aid should be reformed to encourage excellence. The grant-in-aid to educational institutions should be divided into two parts. The first is the ordinary maintenance grant given on some egalitarian principles which will ensure the payment of teachers' salaries and a certain minimum expenditure, for other items. But there should also be a special 'Development Grant' given to institutions on the basis of their performances. This will promote a competition for excellence among the different educational institutions and lay the foundation of a movement which, in the course of time, would succeed in raising standards all round.
- (c) A deliberate policy to encourage the pursuit of excellence should be adopted. At the school stage, good schools should be allowed to develop into experimental schools and freed from the shackles of external examinations. A similar step should be taken at the university stage by the development of 'autonomous colleges' or a more liberal exercise of the authority vested in the Government of India to declare institutions as 'deemed universities'. Encouragement and assistance should be given to outstanding

departments of universities to grow into Centres of Advanced Study and in some universities at least, clusters of Centres of Advanced Study should be built up in related disciplines to strengthen and support one another.

(3) The different educational institutions should help each other in developing this new concept of institutional plans. From this point of view, the programme of 'school complexes' recommended by the Education Commission, deserves consideration. Under this programme, each secondary school will work in close collaboration with the primary schools in its neighbourhood and help through guidance services and sharing of facilities to improve themselves. The same process can be repeated at a higher level between colleges and universities on the one hand and the secondary schools in their neighbourhood on the other. At present, the teachers at different stages of education are engaged in a dialogue of mutual recrimination and passing the buck. For instance, the universities blame the secondary schools for sending up weak students and the secondary schools pass on the blame to primary schools. The programme of school complexes recommended by the Education Commission will put an end to all this and bring the different stages of education together in a programme of mutual service and support.

II. School Complexes : The leadership in the preparation and implementation of the institutional plans will again have to be provided by teachers themselves.

(1) *Primary Schools* : A very different problem is the preparation of plans of primary schools—especially single-teacher schools. The first step to this end will be to train primary teachers and headmasters in this task. This itself is a formidable task, in view of the number involved. But this will not be enough and it will be necessary to provide them with continuous guidance and assistance. For this purpose, it is necessary to adopt the scheme of school complexes

recommended by the Education Commission. Each school-complex will include a high/higher secondary school as its centre and all the primary schools within an area of three to five miles of the central secondary schools. All these institutions should be treated as a unit for purposes of educational planning and development and an attempt should be made to regard it as a 'living cell' in education. It will generally be a small and manageable group of teachers which can function in a face-to-face relationship within easily accessible distance ; and it will also have the essential talent needed because there would be about half a dozen trained graduates within it. This group of teachers can easily help each other and ensure that the primary schools included within the group will prepare and implement satisfactorily plans of their own.

(2) *Secondary Schools* : The guidance to the secondary schools in preparing and implementing institutional plans of their own will be provided partly by the secondary teachers themselves and partly by the college and university teachers. It is desirable that there should be a secondary school headmasters' forum in each district ; and it should be a responsibility of this forum, working through its members, to give guidance to the secondary schools to prepare and implement their plans. Similarly, we may also create a school-complex at a higher level by linking a college or university department with a number of high/higher secondary schools within its neighbourhood. The teachers of the college or the university department concerned can then work with the teachers of the secondary schools in their area and guide them in the preparation and implementation of their plans.

(3) *Panel Inspections* : Yet another method under which teachers can provide guidance in preparation and implementation of the plans of primary and secondary schools is to adopt the system of 'panel inspections' recommended by the Education Commission. At present all inspections of primary and secondary schools are carried out by departmental officers on an annual basis. While this should continue, the Commission has recommended that we should supplement it

with a system of panel inspections of primary and secondary schools to be carried out every three to five years. Each panel will consist of a group of selected teachers or headmasters (including the headmaster of the school to be inspected) and may have a departmental officer as its secretary. The panel should spend a longish time in each institution so that it is able to evaluate its work and give proper guidance. The principal advantage of this system of panel inspection is that it will make the experience and expertise of senior and competent teachers available to all others.

(4) *Colleges* : The colleges will be in a position, without much difficulty to prepare and implement their plans. The guidance needed by them should be given by the universities.

(5) *Universities* : The universities should prepare and implement plans of their own and for this purpose they should set up Academic Planning Boards on the lines recommended by the Education Commission. These should consist of representatives of the universities, along with some persons from other universities and a few distinguished and experienced persons in public life. The Boards should be responsible for advising the university on its long-term plans and for generating new ideas and new programmes and for periodic evaluation of the work of the universities.

III. District, State, and National Plans : In the preparation and implementation of the institutional plans, as will be seen from the preceding discussion, the leadership will mainly vest in the teachers themselves, and other authorities will play an assisting role. In preparing and implementing plans at the district, state and national levels, however, the appropriate authorities will have to take the lead. For instance, the Zilla Parishads or the District School Boards recommended by the Education Commission will be responsible for preparation and implementation of district educational plans. Similarly, the state plans in education will be prepared and implemented by the State Governments and the State Education Departments while the National plans

will be a responsibility of the Government of India and the Ministry of Education. But it is necessary to take adequate steps to ensure that the teachers are effectively associated in the preparation and implementation of education plans at these levels also. From this point of view, the following suggestions are put forward :

(1) The authorities responsible for preparation and implementation of District Development Plans in education should constitute Advisory District Councils of Teachers on which all organisations of teachers functioning within the District will be represented. These Councils should be consulted on all matters relating to planning and development or education.

(2) Similarly, at the State level, the State Government should constitute joint Teachers' Councils consisting of the representatives of all the different organisations of teachers working in the State. These should be consulted on all matters relating to the salaries, conditions of work and service of teachers as well as on all matters relating to the planning and development of education.

(3) The Ministry of Education, in its turn, should constitute a National Council of Teachers consisting of representatives of all teachers' organisations functioning at the national level. Its functions should be similar to those of the joint Teachers' Councils established at the State level and they should be effectively involved in preparation and implementation of educational plans.

A United Teaching Community

If the system of institutional planning is adopted as the foundation of the planning process and if the institutional machinery for consultation with teachers in planning and development of education is created at the District, State and National levels on the lines indicated in the preceding section, the teaching community as a whole will be effectively involved in the preparation and implementation of educational plans. These proposals have been based essentially on the

recommendations made by the Education Commission ; and it is hoped that these will soon be accepted by all the concerned authorities.

The next important question which arises in this regard is whether the teaching community is at present in a position to assume this new responsibility. I have no doubts on this point. But I feel that the competence of the teaching community to assume this responsibility is considerably reduced by divisions within its ranks. The university teachers stand apart as a class by themselves. The headmasters of secondary schools form another group and the teachers of secondary schools also have separate organisations of their own. The primary teachers is again a separate group. There is at present very little intercommunication between these different groups and there are very few opportunities wherein they can work together for common ends and build up closer links between themselves. What is needed therefore is a programme or programmes which will help the teaching community to close up its ranks and to become a united teaching profession. This will immensely increase its authority and capacity to assist in the preparation and implementation of educational plans. In fact, if I were asked to name the most important single task to which the Indian teachers should address themselves at this stage, I will say, with a slight variation of the Marxist manifesto ; 'Teachers of all categories ! Unite ! !' How can we create a unified teaching community in India ? This will essentially need two main programmes :

(1) Changing of Attitudes : The first is to bring about a change in attitudes which are often coloured by the relics of the old colonial tradition or by the caste system as reflected in education. The university teachers often behave as a superior class, the Brahmins of the profession, as it were. Even between them, they are further divided into different groups or sub-castes such as university teachers, college teachers, teachers in Government colleges (who are themselves divided into groups like Class I, Class II, or non-gazetted), etc. The secondary teachers form a middle

group, the Kshatriyas or Vaishyas of the profession. They generally regard themselves as superior to and keep themselves aloof from the primary teachers, while the college teachers towards whose status they aspire keep them at the similar respectable distance. The primary teachers, who are the largest group, form the Sudras of the system and are often treated as such in all respects. It is obvious that in the India of tomorrow which aspires to create a new social order based on justice, liberty, equality and the dignity of the individual, there is no place for such traditional and obsolete attitudes. All teachers belong to one community and are essentially equal and this feeling of brotherhood will have to be deliberately cultivated by all.

(2) Institutional Set-up : Changes in attitudes are difficult to be brought about or maintained over a period of time unless they are supported by the appropriate institutional structures. If teachers of all categories are to cultivate a feeling of brotherhood, opportunities will have to be provided to them, through institutional structures of the proper type, to work with one another in common tasks and thereby to come to know and respect each other. In this context, it is interesting to note that the same structural organisation which has been recommended above for creating a broad-based system of educational planning will also achieve the result of unifying the teaching profession. For instance, the system of school complexes will provide opportunities for secondary school teachers to work with primary school teachers and for university and college teachers to work with secondary school teachers. Similarly, the establishment of District Teachers' Councils, Joint Teachers' Councils at the State level, or the National Teachers' Council at the all-India level on which organisations of teachers of all categories will be represented, will be another important means of enabling teachers of all categories to work together for common ends. The same objective can also be attained by establishing subject teachers' associations. These will no doubt stimulate initiative and experimentation and assist in the revision and upgrading of curricula through the provision of better teaching materials and the use of improved techniques

of teaching and evaluation. But they will also have the additional advantage of bringing together, on a common platform, teachers of all stages from pre-primary to the post-graduate. Such associations should be formed at the district, state and national levels.

The Education Commission has recommended that universities should be involved intensively in programmes of improving school education through research, improvement of curricula, discovery of new methods of teaching and evaluation, training of teachers, discovery and development of talent and preparation of textbooks and other teaching and learning materials. This programme will provide opportunities to university teachers to work in close collaboration with teachers at all other levels.

Developing Adequate Competence for Formulation and Implementation of Educational Plans

While this unity of the teaching profession is a valuable strength which the teachers should cultivate to enable them to provide leadership in educational planning and development, it is not enough to meet the challenge of the situation. The teachers will also have to cultivate two other values or skills, interest and competence in educational planning, if they are to discharge their responsibilities effectively.

(1) **Interest** : It is unfortunate that teachers have so far neglected this important subject and not much interest has been evinced by the teachers' organisations so far in the three Five-Year Plans and in the three Annual plans. They have not even criticised them either in depth or in a comprehensive manner. What is expected of them, however, is not mere criticism but even the formulation of an alternative plan which the public can compare with the official plan and judge for itself. It is obvious that this apathy will have to be abandoned, the sooner the better.

(2) **Competence** : The teachers, either individually or through their organisations, will also have to develop the necessary competence in educational planning. It is true

that this competence will grow as the decentralized programme described in the preceding section is evolved and teachers are actually involved intensively in the formulation and implementation of educational plans. But some formal and institutional attempts to the same end are also needed. For instance, the subject of educational planning and problems of Indian education should find a place in the curricula of all training institutions at all levels. The teacher educators should be properly prepared for developing these programmes in their institutions and the necessary literature on the subject should be prepared in all the modern Indian languages. There should be at least a few centres where advanced level courses in educational planning will be provided at the post-graduate stage ; moreover, the teachers' organisations should set up working groups to study the subject and to educate the teaching community on all its aspects. As in Western countries the teachers' organisations should conduct research and bring out publications and journals on educational planning and such efforts should receive encouragement and assistance from the State.

Summing Up

The main thesis that I have tried to put forward in this address is that it is necessary to involve teachers effectively in the formulation and implementation of educational plans if we have to achieve better success in educational development than what has been possible in the last eighteen years and especially if the programmes of qualitative improvement of education are to be increasingly emphasised. I further stated that, in order to involve teachers in these programmes, it is necessary to adopt a decentralised and broad-based planning process which would include planning at the institutional, district, state and national levels, and to create appropriate teachers' organisations at the district, state and national levels for consultation on all matters of educational development. Even at the risk of violating the balance of space devoted to different aspects of the problem, I have discussed institutional planning in great detail, partly because of its intrinsic significance, but mainly

because it is at this level that the involvement of teachers in the planning process is most intimate and effective. I further emphasise that the capacity of the teachers to assume these responsibilities in the formulation and implementation of educational plans will be considerably increased if the teachers close up their ranks and become a unified community, if they take deeper and more sustained interest in problems of educational development and if they also strive to develop the expertise needed for the purpose.

I will now close on a note of appeal. The participation of teachers in the formulation and implementation of educational plans can yield rich dividends, especially in programmes of qualitative improvement. Several of these programmes such as improvement of textbooks, adoption of better methods of teaching and evaluation, intensive utilisation of available facilities, maintaining contact with the community, individual guidance to students, inculcation of social and moral values, etc. do not need much investment in physical or monetary terms. But their success depends essentially upon the competence of the teachers, their sense of dedication and their identification with the interests of the students committed to their care. But unless we make every effort to cultivate these skills and values, we shall not be able to participate effectively in educational planning and to discharge our responsibilities to education and society. As Dr. D.R. Gadgil observed :

“Qualitative improvement in education, whether we look upon it as a matter of better text-books, improved teaching methods, or examination reform, depends to some extent on additional resources properly employed, but to a larger extent on the ability and sincerity of teachers. Even where the teacher-student ratio, for example, may not be unfavourable, without special effort on the part of teachers, teaching methods cannot improve or the student enthused or self-disciplined. Experiments such as with internal assessment by institutions for even part of the examination have everywhere emphasised the same aspects and brought out the same deficiencies. It is not so much

the resources as objectivity and a certain professional rectitude on the part of teachers and heads of institutions that seem to be required most in this behalf. Whereas, therefore, I would emphasise the need to attain a proper teacher-student ratio and to maintain minimum standards of accommodation and equipment, I would like to emphasise at least equally the importance of general acceptance of certain academic values and professional standards by the body of teachers at all stages of education—elementary, secondary and collegiate.*”

*From the Address to the Conference of Education Secretaries of States and Union Territories, held at New Delhi, March 18-20, 1968.

APPENDIX IV

Some Educational Statistics

Table No.

I	Number of Institutions by Type of Education (1946-47)
II	Enrolment in Institutions by Stages of Instruction (1946-47)
III	Expenditure on Education (1946-47)
IV	Enrolment in Elementary Education (1950-74)
V	Enrolment in Secondary Education (1950-1974)
VI	Growth of Higher Education in India (1950-74)
VII	Education of Girls and Women
VIII	Proportional Enrolment of Scheduled Castes and Scheduled Tribes
IX	Expenditure/Outlay on Education in the successive Five Year Plans (1950-1974)
X	Total Educational Expenditure (1950-74)

TABLE I : Number of Institutions by Type of Education (1946-47)

Provinces	Universities *				Arts and Science Colleges		High Schools		Middle Schools		Primary Schools		Professional, Technical and Training Colleges		Technical Schools and Colleges		Total number of Institutions		Number of Unrecognised Institutions	
Assam	...	22	231	864	9,884	1	881	11,883	1,423	85										
Bengal	2	85	1,887	2,766	41,726	26	3,991	50,483	881											
Bihar	1	23	409	1,542	20,260	7	584	22,826	1,252											
Bombay	1	31	555	626	18,992	24	3,475	23,704	287											
C.P. & Berar	2	14	176	787	5,211	9	71	6,270	547											
Madras	3	77	708	254	36,160	26	586	37,814	228											
N.W.F.P.	...	6	56	272	959	...	2	1,295	317											
Orissa	1	12	89	273	6,615	2	151	7,143	826											

Punjab	1	60	602	3,301	9,060	20	219	13,263	6,252
Sind	...	4	90	163	2,834	5	99	3,195	631
United Provinces	5	149	373	1,850	20,048	17	2,324	24,766	1,509
Ajmer-Merwara	...	5	26	38	305	1	11	386	72
Baluchistan	...	...	14	8	111	...	1	134	...
Bangalore	...	...	15	17	62	...	4	99	...
Coorg	...	...	7	...	118	...	...	125	2
Delhi	1	6	43	66	240	2	15	373	49
Minor Adminis- trations	...	1	16	16	76	...	5	114	16
Total	17	496	5,297	12,843	1,72,661	140	12,419	2,03,873	14,292

** Including Intermediate Colleges.

Source : Progress of Education in India (1937-47), Vol. II, pp. 22-23.

TABLE II
Enrolment in Institutions by Stages of Instruction (1946-47)

Provinces	Primary school stage	Middle school stage	High school stage (including intermediate classes)	Graduate post-gra- duate degrees in General Education	Profes- sional Colleges	Special & Vocational schools	Total
Assam	5,74,055	75,057	37,481	937	126	20,864	7,08,520
Bengal	35,61,822	2,77,718	3,18,082	11,562	9,334	2,02,264	43,80,782
Bihar	10,44,597	1,17,615	96,941	3,285	1,466	20,999	12,84,903**
Bombay	14,96,559	3,24,078	1,45,455	8,419	7,862	1,08,772	20,91,145
C.P. and Berar	5,07,168	58,987	26,456	1,860	1,919	4,982	6,01,372
Madras	33,84,865	3,84,476	1,63,942	9,678	5,188	41,536	39,89,682
N.W.F.P.	1,09,174	28,740	5,717	298	36	215	1,44,180
Orissa	2,74,476	14,818	15,332	948	229	3,807	3,09,610

Punjab	11,13,358	3,88,317	89,626	8,633	3,953	10,653	16,14,540***
Sind	2,03,943	49,366	18,825	1,158	684	3,332	2,77,308
United Provinces	16,94,677	2,81,313	70,595****	11,937****	12,253	78,554	21,49,329
Ajmer-Merwara	25,082	7,179	2,310	214	66	460	35,311
Baluchistan	9,677	1,512	634	...	...	27	11,850
Bangalore	17,267	4,229	2,392	162	...	96	24,146
Coorg	13,367	3,369	1,082	...	...	55	17,873
Delhi	53,744	14,230	5,856*	2,232	998	1,642	78,702
Minor Administration	21,587	5,105	2,165	...	...	689	29,546
Total	1,41,05,418	20,36,109	10,02,891	61,323	44,114	4,98,947	1,77,48,802

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* Includes enrolment in Preparatory Class also.

** Excludes 48 students of Pre-Medical Course in Science College, Patna and 301 scholars not reading in University Course.

*** Excludes 199 scholars in the Oriental College.

**** The number in Intermediate Classes and Degree and Higher Classes excludes 913 scholars reading in Banaras Sanskrit Colleges and in the Oriental Departments of Lucknow and Banaras Hindu Universities.
Source : Progress of Education in India (1937-47), Vol. II, p-45.

Table III : Expenditure on Education (1944-47)
(in thousands of Rs.)

Provinces	Total Indirect* Expenditure	TOTAL DIRECT EXPENDITURE ON					GRAND TOTAL Direct & Indirect
		Universities **	Arts and Science Colleges ***	High Schools	Elementary Schools	Technical, Special & Training Schools	
Assam	27.74	...	13.47	30.15	48.69	17	1,24,50
Bengal	1,36,23	49,46	80,79	2,98,93	2,99,24	23,57	9,83,18
Bihar	58,76	8,70	20,67	55,47	1,23,20	9,25	2,99,12
Bombay	1,16,83	24,92	57,11	2,00,65	4,77,52	31,32	9,60,11
C.P. and Berar	41,58	4,29	13,08	21,45	1,15,35	9,13	2,15,28
Madras	2,38,32	39,22	69,71	2,25,97	5,93,72	41,16	12,95,86
N.W.F.P.	8,24	...	6,40	15,35	27,30	...	58,28
Orissa	22,04	2,54	9,73	12,31	36,01	3,74	91,55
Punjab	1,07,44	34,15	62,02	1,73,83	2,78,66	28,67	7,12,37
Sind	15,80	...	9,10	31,32	88,29	5,58	1,54,03
United Provinces	1,97,13	65,78	84,07	1,13,94	2,00,80	21,14	7,10,45

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Ajmer	2,19	...	1,29	9,57	9,27	57	63	23,51
Merwara	3,18	...	...	3,51	2,54	...	10	9,33
Baluchistan	8,62	...	85	5,97	4,34	...	24	20,02
Bangalore	72	...	...	2,15@	1,69@	...	...	4,55
Coorg	14,85	10,44	7,93	16,21	16,45	12,27	5,53	83,69
Delhi								
Minor Admini-								
nistrations	3,82	...	2,92	5,23	5,75	...	2,57	20,30
Total	10,03,49	2,39,50	4,39,15	12,22,01	23,28,82	1,86,59	3,46,57	57,66,13

*

Covering expenditure on direction and inspection, buildings, furniture and apparatus & Misc.
including Boards of Intermediate and Secondary Education.
Institution.

 (a) Including Boards of Intermediate and Secondary Education.
 (a) Includes Rs. 1,567 on instruction of Agriculture in the High School Curriculum and Rs. 9,245 spent on training teachers in High Schools.
 (a) Includes Rs. 264 spent on Weaving Classes and Rs. 813 spent on Carpentry Classes attached to Primary Schools.

Source : Progress of Education in India (1937-47), Vol. II. pp. 66-67.

**Table IV : Enrolment in Elementary Education
(1950-1974)**

<i>Plan & year</i>		<i>Enrolment in Grades I-V (Millions)</i>	<i>Percent- age of children enrolled in Gr. I-V to total population in age- group 6-11</i>	<i>Enrol- ment in Grades VI-VIII (Millions)</i>	<i>Percent- age of children enrolled in Grade VI-VIII to total population in age- group 11-14</i>
<i>1</i>		<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1950-51					
First Plan	Boys	13.8	60.8	2.6	20.8
	Girls	5.4	24.9	0.5	4.3
	Total	19.2	42.6	3.1	12.9
1955-56					
Second Plan	Boys	17.5	72.0	3.4	25.4
	Girls	7.6	32.8	0.9	6.9
	Total	25.1	52.8	4.3	16.5
1960-61					
Third Plan	Boys	23.6	82.6	5.1	32.2
	Girls	11.4	41.4	1.6	11.3
	Total	35.0	62.4	6.7	22.5

1965-66					
	Boys	32.2	96.3	7.7	44.2
	Girls	18.3	56.5	2.8	17.0
	Total	50.5	76.7	10.5	30.9
1968-69					
Fourth Plan	Boys	34.2	95.6	9.0	47.0
	Girls	20.2	59.6	3.5	19.3
	Total	54.4	78.1	12.5	33.5
1973-74					
	Boys	39.4	100.0	10.5	48.0
	Girls	24.4	66.0	4.5	22.0
	Total	63.8	84.4	15.0	36.0

Source : 1. Education in the Fifth Five Year Plan (1974-79). Ministry of Education and Social Welfare, 1972 (for 1950-51, 1955-56, 1960-61, 1965-66 and 1968-69).

2. Draft Fifth Five Year Plan (1974-79), Planning Commission, Chapter VIII for 1973-74.

**Table V : Enrolment in Secondary Education
(1950-74)**

<i>Plan & Year</i>		<i>Enrolment in Grades IX-XI (Millions)</i>	<i>Percentage of children enrolled in Grades IX-XI to total population in the age-group 14-17</i>
1950-51			
First Plan	Boys	1.09	9.3
	Girls	0.16	1.5
	Total	1.25	5.5
1955-56			
Second Plan	Boys	1.65	13.4
	Girls	0.33	2.9
	Total	1.98	8.3
1960-61			
Third Plan	Boys	2.47	17.5
	Girls	0.56	4.3
	Total	3.03	11.1
1965-66			
Fourth Plan	Boys	4.08	25.5
	Girls	1.20	10.4
	Total	5.28	16.9

1968-69			
Fourth Plan	Boys	4.90	28.3
	Girls	1.58	9.5
	Total	6.48	19.1
1973-74 (Estimates)			
	Boys	6.16	31.0
	Girls	2.34	12.0
	Total	8.50	22.0

Source : 1. Education in the Fifth Five Year Plan (1974-79), Ministry of Education and Social Welfare, 1972 (for 1950-51, 1955-56, 1960-61, 1965-66 and 1968-69).

2. Draft Fifth Five Year Plan (1974-79), Planning Commission, Chapter VIII for 1973-74.

Note : Enrolments given in column 2 include those in classes XI and XII of Intermediate Classes in U.P. which the state government regards as part of secondary education.

Table No. VI : Growth of Higher Education in India
(1950-74)

Year	No. of Universities	No. of Affiliated Colleges	Total Enrolment
1950-51	27	695	3,62,223
1955-56	33	1,025	6,08,255
1960-61	45	1,542	8,95,541
1965-66	64	2,572	14,63,719
1971-72	86	3,896	32,62,314

Sources : University Grants Commission. The figures of enrolment include that in Intermediate classes of the Board of High School and Intermediate Education in U.P. in 1971-72 but exclude it in other years.

Table VII : Education of Girls & Women
(in lakhs)

	<i>Enrolment of girls in</i>			
	<i>Primary School Classes (I-V)</i>	<i>Middle School Classes (VI-VIII)</i>	<i>Secondary School Classes (IX-XI)</i>	<i>Colleges and Universities (General Education)</i>
1946-47	36.8 (37)	3.2 (18)	0.7 (12)	0.16 (10)
1950-51	53.85 (39)	5.34 (20)	1.66 (15)	0.37 (14)
1955-56	76.39 (44)	8.67 (25)	3.29 (21)	0.75 (17)
1960-61	113.47 (48)	16.70 (32)	5.56 (23)	1.33 (22)
1965-66	182.93 (57)	28.46 (37)	12.05 (30)	2.91 (28)
1968-69	199.36 (59)	34.93 (39)	15.79 (32)	4.37 (30)
1973-74	244.01 (62)	45.37 (43)	23.40 (36)	9.0 (31)

Notes : (1) Figures in parenthesis indicate the number of girls for every 100 boys enrolled.

(2) Figures in the last column relate to enrolments at under-graduate, post-graduate and research stages in general education—arts, science and commerce courses.

Sources: (1) Figures for school enrolment in 1950-51, 1960-61, 1965-66, 1968-69, are from Ministry of Education, Form A.

(2) Figures for school enrolment in 1973-74 (target) are from 'Draft Fifth Five Year Plan, 1974-79' Vol. II p. 197.

(3) Figures of enrolment in colleges and universities are taken from Ministry of Education, Form A, for all years up to 1968-69.

Table VIII : Proportional Enrolment of Scheduled Castes and Scheduled Tribes

<i>Sl. No.</i>	<i>Type of Institution</i>	<i>Proportion of Enrolment of Scheduled Tribes to total Enrolment</i>				
		1960-61	1964-65	1967-68	1960-61	1964-65 1967-68
1.	Pre-Primary Schools	5.3	5.5	6.0	3.5	3.4 2.9
2.	Primary/Jr. Basic School	12.0	12.9	13.0	5.0	5.5 5.3
3.	Middle/Sr. Basic Schools	8.7	9.4	9.2	3.3	3.1 3.5
4.	High/Higher Secondary Schools	7.1	7.7	7.7	1.3	1.6 1.7
5.	Universities and Colleges for Education	5.0	4.5	4.6	0.9	1.1 1.1

6.	Colleges and Schools for Professional & other education	11.8	8.3	11.1	5.5	4.5	6.0
	Total	10.4	10.8	10.8	4.0	4.2	4.1
	Proportion of S.C./S.T. population to total population	14.0			6.8		

Source : Ministry of Education, From A-1, for the years concerned.

Note : (1) The earliest year for which the data is available (though a little incomplete) is 1959-60 and the latest year for which the data is available is 1967-68.

(2) We expect that the proportion of Scheduled Castes and Scheduled Tribes students in the total enrolment should be the same as that of the S.C. and S.T. population in the total population of the country. It will thus be seen that :

(a) It is only at the primary stage that the education of scheduled castes and scheduled tribes is nearing equality with others.

(b) As one goes up the education ladder, the proportion of S.C. and S.T. enrolment declines steeply. This shows that the wastage rates are higher for S.C. and S.T.

(c) On the whole, the S.T. are even more backward than the S.C.

It also appears that the rate at which S.C. and S.T. are gaining equality is slow,

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Table IX : Expenditure/Outlay on Education in the Successive Five Year Plans (1950-1974)

(Rupees in crores)

Sl. No.	First Plan	Second Plan	Third Plan	Annual Plan years	Fourth Plan	Total
1. Elementary Education	85 (56)	95 (35)	178 (30)	65 (20)	239 (30)	662 (31)
2. Secondary Education	20 (13)	51 (19)	103 (18)	53 (16)	140 (18)	367 (17)
3. University Education	14 (9)	48 (18)	87 (15)	77 (24)	195 (25)	421 (20)
4. Teacher Education	*	*	23 (4)	9 (3)	*	32 (2)
5. Adult Education	5 (3)	4 (1)	2 (—)	2 (1)	5 (1)	18 (1)
6. Cultural Programmes	**	3 (1)	7 (1)	4 (1)	12 (2)	26 (1)

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7. Other Educational Programmes 9 23 64 31 90 217
(6) (8) (11) (9) (11) (10)

Total General Education 133 224 464 241 681 1743
(87) (82) (79) (75) (87) (82)

8. Technica Education 20 49 125 81 106 391
(13) (18) (21) (25) (13) (18)

Grand total Education 153 273 589 322 786 2153
(100) (100) (100) (100) (100) (100)

100

Source : 1. Education in the Fifth Five Year Plan (1974-79), Ministry of Education & Social Welfare, 1972, for the First, Second and Third Plans.

2. Draft Fifth Five Year Plan (1974-79), Planning Commission, for the Fourth Plan

3. Figures in parenthesis indicate percentages of total.

* Included in parenthesis indicate percentages of total.

** Included under other educational programmes.

N.B. These do not include allocations for education under other Ministries such as Food & Agr. Health or Labour & Employment.

Table X : Total Educational Expenditure (1950-74)

(Rupees in crores)

Object of Expenditure	1950-51	1955-56	1960-61	1965-66	1968-69	1973-74 (Estimate)
Direct						
1. Elementary Education	44.30	69.38	116.96	214.14	319.22	500
2. Secondary Education	29.07	45.72	83.52	147.84	294.48	350
3. Higher Education	17.68	29.71	56.88	131.81	148.86	260
Total (Direct)	91.05	144.81	257.36	493.79	763.26	1110
4. All indirect expenditure	23.33	44.85	87.02	128.23	139.58	240
GRAND TOTAL	114.38	189.66	344.38	622.02	902.84	1350

Source : Ministry of Education, From A.

DR. K.G. SAIYIDAIN

I

BIOGRAPHY

Born at Panipat, India, October 16, 1904.

Died at New Delhi, December 19, 1971.

Academic Record :

B.A. (Aligarh University, India), First, 1923.

Diploma in Education (with Distinction), Leeds University (U.K.).

M. Ed. (Research Degree in Education), Leeds University (U.K.), (Thesis on Modern Educational Tendencies in Europe and America).

D. Litt. (Hon. Causa), Aligarh University, 1962.

Languages Known :

English, Urdu, Persian, Arabic and French.

Fields of Specialization :

Education at various levels, Social & Cultural Problems : Problems of Values, Islam.

Teaching and Administrative Positions Held :

Principal, Training College and Professor of Education at Aligarh University, 1926-38.

Director of Education, Jammu and Kashmir State, 1938-45.

Educational Adviser, Rampur State, 1945-47.

Educational Adviser to the Bombay Government, 1947-50.

Joint Secretary and later Secretary and Educational Adviser to the Government of India (Ministry of Education) from 1950 to 1961.

Visiting Professor of Education, Columbia University, New York, 1958.

Visiting Professor of Education, University of Wisconsin (U.S.A.), 1962-63.

Senior Scholar, East-West Center, Hawaii (U.S.A.), 1963-64.

Visiting Professor of Education, Stanford University, 1964.

Member, Education Commission, 1964-66.

Director, Asian Institute of Educational Planning & Administration, 1966-68.

Membership of Educational and Cultural Bodies in India :

Member, Basic National Education Committee and All India Board of National Education.

Member, Secondary Education Commission.

Member, University Grants Commission.

Chairman, Educational Reorganization Committee, Bihar State.

Member, Commission on Anglo-Indian and European Education.

Member and Secretary, Central Advisory Board of Education.

Vice-President, Indian Council for Cultural Relations.

Member, Academy of Letters.

Member, Senate and Syndicate of Various Universities in India.

Member, Education Panel, Planning Commission.

Contacts with Unesco :

Member of the Indian Delegations to the Unesco General Conference in 1945, 1946, 1953, 1956 and 1958.

Indian Delegate to Fundamental Educational Conference, Nanking, 1947.

Member, Unesco Consultative Committees on Adult and Fundamental Education.

Member, Unesco Committee on Education for Living in a World Community.

Indian Delegate to the Unesco Regional Seminar on Adult Education, 1949.

Leader of the Indian Delegation and President of the U.N. Regional Youth Welfare Seminar, 1951.

Member, Unesco International Advisory Committee on School Curriculum, 1958.

Member, Unesco Committee on the Social and Moral Implications of the Peaceful Uses of Atomic Energy, 1958.

Leader of the Indian Delegation and President, Unesco Regional Seminar on Compulsory Education in South-East Asia, 1958.

Member, Indian National Commission for Cooperation with Unesco.

Chairman, Executive Board of the Indian National Commission for Cooperation with Unesco.

Indian Delegate to the Commonwealth Education Conference, Oxford (England), 1959.

International and Foreign Assignments :

Member, International Delegation of the New Education Fellowship to Australia (1946).

Member and Adviser on Education to the World Bank Mission to Iraq (1951).

Chairman, International Commission on Educational Reorganization for Sudan (1955).

International President, New Education Fellowship (London).

Delivered Special Lectures on Problems of Indian Education at the University of London (1954).

Lectured at Various American Universities at the invitation of the Rockefeller Foundation (1954).

Delivered the Sachs Memorial Lectures at Columbia University (1958).

Delegate to Asian Relations Conference and Indian-American Conference, New Delhi.

Member, Educational Board, New Education Book Club, London.

Member of the Commission of Experts on the International Study of University Admission.

PUBLICATIONS

(a) In English :

1. *The School of the Future*, The Indian Press Ltd., 1935.
2. *Education and the National Character*.
3. *Aligarh Movement in Education*.
4. *The Activity School* (Indian Edition of Ferrier's *L'Ecole Active*), Kitabistan, Allahabad, 1936.
5. *Education for International Understanding*, Hind Kitab Ltd., 1948.
6. *Iqbal's Educational Philosophy*, Arafat Publication, Lahore, 1938. Revised and Enlarged Edition, 1954.
7. *Problems of Educational Reconstruction*, Asia Publishing House, Bombay, 1950. Revised, 1962.
8. *Education, Culture and Social Order*, Asia, 1952, 1963.
9. *Azad's Contribution to Education* (Sayaji Memorial Lectures).
10. *A National Service Scheme for India*.
11. *Access to Higher Education*, (Unesco), 1962.
12. *The Challenge of Freedom to Education* (Wisconsin University Lectures).
13. *Education and the Art of Living* (Columbia University Julius & Rosa Sachs Endowment Fund Lectures), Bureau of Publications, Teachers' College, Columbia University, 1959.
14. *Man in the New World* (Gen. Edu. Reading Project, Aligarh University) Asia, 1964.
15. *The Faith of an Educationist : A Plea for Human Values*, Asia, 1965.
16. *The Humanist Tradition in Indian Educational Thought*, Asia, 1966.

17. *Universities and the Life of the Mind*, Asia, 1965.
18. *Report on National Youth Service*.
19. *Dr. Zakir Husain's Humanism* (Dr. Zakir Husain Memorial Lecture), Madras, 1970.
20. *Maulana Azad's Contribution to Education*, Baroda University, 1961.
21. *The Crisis in Modern Society* (Bunker Memorial Lectures at Jaffna College, Ceylon, 1969), 1970.
22. *The Quest for the Good Life* (Bhatia Lectures at the World Institute of Culture, Bangalore).
23. *Tagore Lectures on Ghalib* (Gujarat University Lectures), 1969.
24. *The Significance of Gandhi as a Man & a Thinker*, (Patel Memorial Lectures, All India Radio).
25. *Language, Life & Education* (Surat University Lectures) 1971.
26. *Facets of Indian Education*, National Council of Educational Research and Training, 1970.
27. *Compulsory Education in India* (Co-authors : Abid Husain & Naik), Universal Publication, 1966.
28. *The Educational System*, Oxford University Press, 1943.

(b) In Urdu :

1. *Usul-i-Talim* (Principles of Education), Hindustani Academy, Allahabad, 1949.
2. *Ruh-i-Tahzib* (The Spirit of Culture).
3. *Aligarh ki Talimi Tahrik* (Aligarh Movement in Education).
4. *Qaumi Seerat ki Tashkil* (Formation of National Character).
5. *Shahid-i-Wafe* (Martyr to Faith), Nizami Press, Badaun, 1934.

6. *Andhi men Chiragh* (Lamps in the Storm), Indian Academy, 1962. (Academy of Letters Award for Best Book of the Year, 1964).
7. *Zehn-i-Insani ka Musalsal Irtiqa* (Evolution of Human Mind), (Nizam Lectures at Delhi University).
8. *Zaban, Zindigi aur Talim*, Anjuman Tarriqi Urdu, Aligarh, 1971.

(c) In Hindi :

1. *Bharatiya Shakshanik Vichaardhaara* (Indian Educational Thought), 1969. Central Hindi Directorate, Ministry of Education, Government of India, Minakshi Prakashan, Begum Bridge, Meerut.
2. *Shiksha Shastr* (Science of Education), Rajkamal Prakashan, 1962.

III

HONOURS AND AWARDS RECEIVED

Padma Bhusan : (One of the Highest National Awards) by the President of India, 1966.

Sahitya Academy award for the best book of the year "Andhi Men Chiragh".

Presentation of Commemoration Volume on the 60th Birthday, presided over by the President of India, 1963.

Degree of Doctor of Literature (Honoris Causa) conferred by Aligarh University, 1962.

Teachers' College Columbia University Medal for Distinguished Service, Citation on the Occasion of the Award.

President, World Education Fellowship, London.

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